THIRD EDITION

FIRE AND EMERGENCY SERVICES ADMINISTRATION
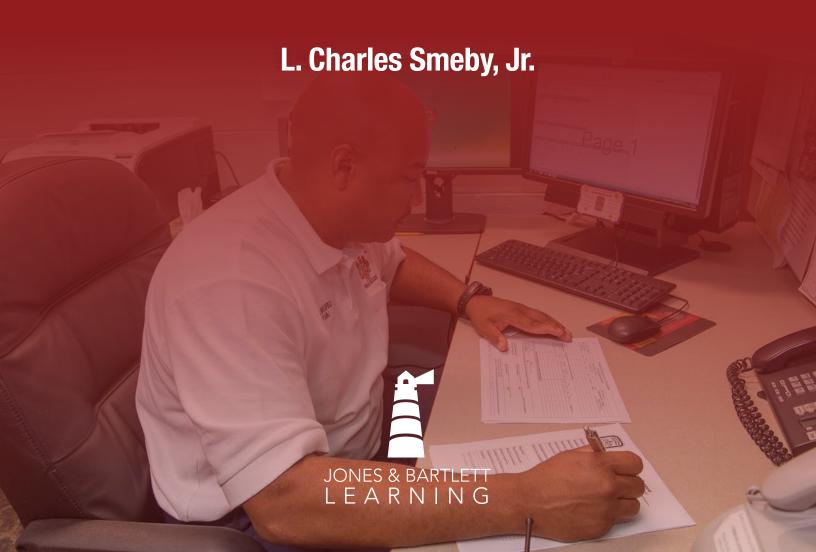
MANAGEMENT AND LEADERSHIP PRACTICES

L. Charles Smeby, Jr.

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MANAGEMENT AND LEADERSHIP PRACTICES

L. Charles Smeby, Jr.

World Headquarters
Jones & Bartlett Learning
5 Wall Street
Burlington, MA 01803
978-443-5000
info@jblearning.com
www.jblearning.com
www.psglearning.com

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21540-3

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Printing and Binding: LSC Communications

Printed in the United States of America
25 24 23 22 21   10 9 8 7 6 5 4 3 2 1

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About the Author

Chief (Retired) Smeby recently retired after 16 years as an adjunct professor at the University of Florida where he developed, created, and presented fire science courses. In addition, he administered the Fire and Emergency Service Bachelor's distance learning program at the University.

Previously, he was a Senior Fire Service Specialist at the National Fire Protection Association (NFPA) in the Public Fire Protection Division. He coordinated several NFPA fire service technical committees and provided guidance to the implementation, understanding, and intent of NFPA fire service standards for professional qualifications; training; protective clothing; deployment of emergency resources; and safety, health, and wellness.

Before joining the NFPA, Mr. Smeby had a 20-year career with the Prince George's County, Maryland, Fire Department (PGFD), where he retired as a Battalion Chief. At PGFD he served as a commander of a very busy seven-station battalion for several years. Subsequently, he was assigned as the first safety chief for this metro department that protected over 700,000 people in 530 square miles from 47 fire stations. He helped the department implement policies to comply with OSHA's Fire Brigade Standard and the NFPA 1500 *Standard on Fire Department Occupational Safety, Health, and Wellness Program.*

In addition, he served on the Fire Department Accreditation Task Force for the International Association of Fire Chiefs. Presently, he is a member of the NFPA 1710 *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* technical committee. He is a Life Member of the International Association of Fire Chiefs and the National Fire Protection Association.

He has also achieved the following professional certifications:

Fire Officer IV, Maryland Fire Service Personnel Qualifications Board

Fire Instructor III, State of Florida, Bureau of Fire Standards and Training

Fire Inspector, State of Florida, Bureau of Fire Standards and Training.

Prior to his salaried PGFD career, Mr. Smeby began his service as a volunteer with the Bethesda-Chevy Chase Rescue Squad in Bethesda, Maryland and the College Park Volunteer Fire Department in College Park, Maryland. He has also lectured in the fire science programs at Prince George's Community College and the University of Maryland. His education includes a Bachelor's degree in Fire Protection Engineering and a Master's of Public Policy from the University of Maryland.

Reviewers

Terrence Blackmer
Assistant Fire Chief
Delta College Fire Science Training Coordinator
University Center MI
Mayville Fire Department
Mayville, MI

David S. Blevins, Director of EMS Education
Roane State Community College
Knoxville, TN

Brian K. Blomstrom, MPA, CFO, CTO, PEM
Staff Sergeant
Greenville Department of Public Safety
Greenville, MI

Bradley B. Brooks, LT/AEMT
Pooler Fire-Rescue
Pooler, GA

Robert DiPietro, Deputy Fire Chief (retired)
Central Arizona Valley Institute of Technology
Coolidge, AZ

Vance L. Duncan III, EMT-P, MPA, MiFireE
Deputy Chief, Training Division
City of Erie, Bureau of Fire
Erie, PA

Christopher L. Gilbert, Ph.D.
Training Officer, Tactical Medic, Hazardous Materials Officer
Alachua County
Gainesville, FL

Tony Hargett, Senior Developer/ Instructor
Aqua 7 Rescue
Surfside Beach, SC

Gary R. Johnson, MBA, MIFireE
Program Director/Associate Professor
Fire Science Technology/Technical Rescue
Central Ohio Technical College
Newark, OH

Jeffrey LeBlanc, Captain
Meriden Fire Department
Meriden, NH

Geoffrey Low, Fire Chief
Orono Fire Department
Orono, ME

Christopher Maeder, BA, EMT-P
Chief of Department
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Poughkeepsie, NY

Matthew Marlow, Fire Chief
Medway-Grapeville Fire District
Climax, NY

Fred J. McAnn, MS, CFO, MIFireE
Assistant Fire Chief
Haughton Fire Department
Haughton, LA

Larry Murphy, Asst. Chief
HFD/Lakeside EMS
Hurst, IL / Effingham, IL

Douglas Rohn, Assistant Chief
Verona Fire Department
Verona, WI

Leigh H. Shapiro
Deputy Chief/Senior Tour Commander (Ret.)
Hartford Fire Department
Hartford, CT

Brian J. Ward
Global Safety and Health: Emergency Preparedness
    and Response Leader
Georgia Pacific
Atlanta, GA

Tim Whitham, MS, EFO, CFO
Fire Chief
Edwardsville Fire Department
Edwardsville, KS

Warren Whitley, Assistant Chief (ret)
Prince William County Department of Fire & Rescue
Prince William, VA

Jason Zangara, MPH, NREMT, AIFireE
Chief Executive Officer
Fire & Emergency Services Consultants
Manville, NJ

Foreword

This text is focused on all levels of chief officers who administer, manage, or lead fire, emergency medical services (EMS), rescue, and/or emergency management organizations. After reading and studying this text, chief officers (who, when acting in their various roles, are also called "managers," "leaders," and "administrators") will have the knowledge to make policy decisions and the skills needed to lead the organization through progressive change. These same abilities will help anyone in a top position thrive and survive—despite any political pressures that are present in the public or for-profit emergency services agency.

Many fire departments and EMS organizations were propelled into a new level of consciousness after the September 11, 2001 terrorist attack; these organizations are entering a new era of expanded and professional emergency services, including EMS, hazardous materials response, fire prevention, and disaster planning. In addition to these services, however, traditional fires still occur. Although fewer fires occur now than in the past, these incidents remain a challenge, perhaps even more so now because firefighters have less real-world experience. For example, a 2013 *Boston Globe* story reported that "…city records show that major fires are becoming vanishingly rare. In 1975, there were 417 of them. Last year, there were 40. That's a decline of more than 90 percent. A city that was once a tinderbox of wooden houses has become—thanks to better building codes, automatic sprinkler systems, and more careful behavior—a much less vulnerable place [for fire threat]."*

However, today's fires can be hotter and faster spreading. Newer buildings use structural components that do not have the same fire resistance possessed by older construction, often resulting in earlier structural collapse during a fire. The contents of modern buildings have higher rates of heat release and smoke, resulting in shorter times to flashover.

The fire and emergency services (FES) profession has made many progressive changes in equipment, training, and funding, but the job of making improvements is never complete. This text provides the knowledge needed by chief officers to identify and implement progressive change that will help keep first responders safe while providing the best public fire and emergency services.

The Challenge of Gaining New Knowledge

Remember the firehouse pronouncement "200 years of tradition unhampered by progress"? (It is now actually closer to 285 years since the first volunteer fire department was created in 1736!) If you are reading this text, you are probably open-minded about the future and new knowledge; but remember, many people remain fearful of change. This fear can result in strong opposition to new ideas. Expect to hear "we tried that before and it did not work," "it is too expensive," "the union/elected officials/management will never approve," etc. Keep in mind that this resistance is not personal. It can, however, be overcome by persistence and truthful knowledge.

The advice in this text will challenge accepted wisdom in FES' custom, culture, and traditions. Be a risk taker and consider new ideas, but remain cautious. Ask yourself if the idea is based on hard scientific data or if it is just someone's opinion. Seek out other open-minded individuals in your agency with whom you can speak privately. You may scare some members of your organization if you openly express your newfound ideas. Turn on the light of knowledge slowly for these members. Perseverance is the key. Never give up and be prepared for a long, slow journey. Your successes will be worth the wait.

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* Plenty of firefighters, but where are the fires? As 'emergency' changes its meaning, some critics are arguing it's time to revisit a century-old system, Leon Neyfakh, September 8, 2013, © 2020 Boston Globe Media Partners, LLC. Retrieved from https://www3.bostonglobe.com/ideas/2013/09/07/plenty-firefighters-but-where-are-fires/isCPrIPauX078UKHdixu0K/story.html?arc404=true

CHAPTER **1**

Historical Foundations of Fire and Emergency Services

LEARNING OBJECTIVES

After studying this chapter, the student will be able to:

- Understand the history of fire and emergency services (FES) and its impact on contemporary organizations (p 3).
- Examine the effect that the insurance industry has had on building and fire prevention codes (p 4).
- Examine the influence of the National Fire Protection Association (NFPA) on the fire service (p 5).
- Explore federal involvement in regulation and funding of state and local FES (pp 6–10).
- Examine challenges in FES (pp 10–12).
- Examine progressive trends in FES (pp 12).

Case Study

Slow Progress in Fire and Emergency Services

In 1994, a state fire marshal was in the process of reviewing plans for a new casino ship that would dock in his state and sail on the Mississippi River when he decided to make inquiries to find out if there was a fire safety standard that covered casino ships. He found that the NFPA did not have a standard at that time (subsequently, at the request of the U.S. Coast Guard, the NFPA did create a fire safety standard for these ships).

The fire marshal then noticed that the permit applicant was the previous owner of the Beverly Hills Supper Club in Southgate, Kentucky. This nightclub was the location of a tragic fire in 1977 that took the lives of 165 victims. The marshal asked himself how this person, who was at least partially responsible for many fire deaths, could be allowed to own and operate a ship that needed to be safe enough to protect the lives of thousands.

As he began to think about this situation, he remembered a more recent tragic fire that occurred. In 1991, a fire broke out at a meat processing plant in Hamlet, North Carolina; the fire claimed the lives of 25 workers. The owner was convicted of 25 counts of manslaughter, lost all his wealth in civil court action, and spent many years in prison. This sentence was in sharp contrast to the consequences encountered by the owner of the Beverly Hills Supper Club some 14 years prior.

As this case exemplifies, there has been a great deal of progress in the FES, but because it is relatively slow and not always obvious to the casual observer, some might believe that these tradition-based services are unaffected by change. This is not true; the following examples demonstrate relatively recent progressive changes in the FES:

- Smoke alarms
- Seat belts and air bags
- Hurricane- and earthquake-resistant construction
- Paramedic services
- Professional firefighter and officer competency standards
- Federal grants for FES
- Compressed air foam
- National standards for emergency medical training and certification
- Higher education opportunities
- United States Fire Administration (USFA) and the National Fire Academy
- National incident management system
- Residential fire sprinklers
- Safety standards for firefighters and fire suppression operations
- Defibrillators
- Federal support for disaster mitigation
- NFPA standard for the deployment and staffing of fire companies
- Thermal imaging cameras
- Hydraulic rescue tools
- National focus of emergency response to major disaster events
- Chem-bio detectors

Discussion Questions

1. Identify and list three examples of progress for the U.S. Wildfire problem.

2. Name Issues with future progress hampered by lack of nationwide standards or regulations (for example: Occupational Health and Safety Administration [OSHA], emergency medical service professionals, NFPA, or insurance industry).

3. Identify and list protocols or techniques in need of progress for contagious diseases.

Prologue to the Future

FES administrators should always be thinking about the future and looking ahead. However, it is important to begin with a basic understanding of how we arrived at where we are today. Like any journey, you need to know where the trip began and where you are at present to plan the route to the future, including all the points along the way. The history of a profession is important because it explains many current policies and points to issues that remain unresolved. By examining the history of FES specifically, you can gain insight into the foundation of these organizations, avoid mistakes, and identify what worked in the past to serve as a guide toward a brighter future. Ultimately, your role in leadership, administration, and management can be enhanced with knowledge of the history and current status of the FES profession.

Local Beginnings

The first fire protection service on record in North America started in 1648 in the town of New Amsterdam, now part of New York City. Like other early fire departments that soon followed, it was an all-volunteer organization. However, it was not long before the public began to demand fire safety codes and paid fire departments to combat the massive fires that struck many large cities across the United States as a result of combustible construction and careless fire safety behaviors. In 1853, the nation's oldest fully paid fire department was organized in Cincinnati, Ohio **FIGURE 1-1**.

As demand for fire protection grew, other towns and cities developed their own independent fire departments. However, the need for communication and standardization across departments soon became clear. When a large conflagration consumed Baltimore in 1904, the mayor called on fire departments in Washington, DC, Philadelphia, and New York to assist. These agencies responded but were dismayed to find that their hose couplings would not fit the Baltimore fire hydrants, and the city continued to burn.

These local origins also explain why there are now more than 29,000 fire departments across the United States. Most of these departments protect a population of fewer than 2,500 citizens, and only 16 departments protect more than one million people each (Evarts & Stein, 2020). Interestingly, the largest

FIGURE 1-1 Early American firefighters.
© Alpha Historica/Alamy Stock Photo.

FIGURE 1-2 Vintage Ambulance 1934. At the beginning of EMS, patients were just transported to hospitals without emergency medical treatment.
© Margo Harrison/ShutterStock.

department—New York City Fire Department—is actually a consolidation of five counties (New York City is made up of five boroughs, each of which is also a county in New York State.)

Emergency medical response also started out on a small scale. The first prehospital medical response system on record served with Napoleon's army in 1797. This system was designed to triage and transport the injured from the battle field to aid stations. More modern field care and transport began after the first year of the Civil War. Civilian ambulance services in the United States began transporting patients to hospitals in Cincinnati in 1865 and in New York City in 1869. Later, funeral home hearses, which often doubled as ambulances, were eventually replaced by fire department, municipal, and private ambulances **FIGURE 1-2**.

National Development Efforts

Development of the Modern Fire Service

As of 2017, the United States had an estimated 29,819 fire departments. Because there are relatively few federal regulations for fire services in the United States, there could be 29,819 different ways to provide public fire protection. For example, NFPA Fire Service standards are voluntary unless adopted as law by a government. And for FES, they are written more as an outline and do not have specific educational, training, or testing criteria.

Volunteer firefighters staff most of the U.S. fire departments, about 65%, and serve primarily small populations of 2,500 or less. Presently, all-paid or mostly paid departments protect 69% of the U.S. population, all-volunteer departments protect 19.0%, and the rest are protected by combination departments (Evarts and Stein, 2020). Even with the lack of federal regulation, the equipment and procedures of these departments are relatively uniform because of past initiatives, primarily the **Insurance Service Office (ISO) Grading Schedule**.

Insurance Service Office

Most of the uniformity among fire service practices and equipment that exists today is a direct result of the *ISO Grading Schedule for Municipal Fire Protection* (ISO, 2012). This document was created in the early 1900s by the **National Board of Fire Underwriters**, an organization whose members come from the insurance industry. The effort was undertaken after several insurance providers went bankrupt trying to pay claims from citywide fires that resulted in financial panic in the insurance industry.

The insurance industry wisely realized that it needed to encourage fire departments to prepare for large-scale fires by giving them the ability to provide mutual aid to other fire departments that could not handle major fires on their own. The grading schedule surveyed public fire protection departments in urban centers throughout the United States and aimed to create uniformity. This generally resulted in increases in the number of fire stations and staffing of fire companies. Municipalities that did not adopt the ISO's recommendations faced the prospect of higher insurance costs.

As a result of improvements in public fire services, lower insurance rates primarily benefited commercial properties. For example, Highly Protected Risk buildings have their own insurance rates that are lower than the general class rates. These properties are primarily those protected by engineered automatic supervised sprinkler systems and are found in buildings owned by large corporations.

Today, municipalities are graded with a numerical rating from Class 1 to 10, with 1 being the best rating. A community that has a Class 1 rating has lower insurance premiums than a community with a higher rating. Many fire chiefs (administrators) have justified budgetary increases for items recommended by the ISO to improve a community's rating, thus lowering insurance costs. Unfortunately, this national standardization initiative has not been accepted completely by all departments because the numerous ratings have several levels of compliance.

Some fire officials and municipal administrators have been openly critical of the grading schedule. To receive a high rating, a fire department has to invest heavily in many fire companies, including increased staffing levels. However, as the probability of large-scale fires has decreased, public officials have questioned the need for large crews (up to six firefighters per company) and close spacing for fire stations (sometimes as close as three-quarters of a mile apart).

In addition, there have been complaints regarding the relevancy of the grading schedule. For example, in June 2007, a tragic fire in Charleston, South Carolina resulted in the death of nine firefighters. At the time, Charleston Fire Department was one of 38 departments in the country with an ISO Class 1 rating. In a December 2008 article in *Fire Chief* magazine, Charles Jennings, Ph.D., MIFireE, CFO commented: "Numerous studies have questioned whether compliance with the [ISO Grading] schedule is correlated with better fire services or lower losses. In the wake of the deaths in the Class 1 Charleston (SC) Fire Department, an embarrassed insurance industry trotted out proposed revisions to the schedule, which hasn't been updated since 1980" (Jennings, 2008). Some of the potential revisions include increased reference to NFPA standards, additional emphasis on firefighter safety and training, and credit for adoption and enforcement of model building and fire prevention codes.

Still, although complaints regarding the validity of this grading scale may be well-founded, it has helped fire departments from different areas fight fires together, and many departments rely on the grading schedule to justify and plan improvements to their departments.

Commission on Fire Accreditation International

As an alternative to ISO for planning, the **International Association of Fire Chiefs (IAFC)** and the International

City/County Management Association have created a new accreditation program for fire and emergency rescue agencies. The **Commission on Fire Accreditation International** self-assessment process can be used to measure fire department capabilities, response times, and compliance with nationally recognized standards. Some criticism about this process indicates that departments receive accreditation even though they do not meet all of NFPA standards, especially staffing and response time criteria.

As of August 2018, 247 fire departments have been accredited. The program is a comprehensive self-analysis of each agency's ability to provide professional FES to the public. A committee of public fire protection experts appointed by the IAFC and International City/County Management Association evaluates the competencies using professional standards as guidelines. Although this effort is a step in the right direction, stricter requirements are still needed for accreditation and compliance with standards on firefighter safety, deployment, and staffing.

Facts and Figures

Subzone Rating Factors

When State Farm insurance company abandoned the ISO grading schedule in 2001 for homeowner's single family dwellings insurance rates, it was uncertain what budgetary planning tool would be used as a replacement for funding local fire departments. State Farm changed to a system that determines insurance rates based solely on the loss experience in *subzone rating factors*. These factors include fire, wind, hail, water damage, theft, and liability. (This is the primary statistical tool U.S. state regulator agencies use to set insurance premiums.) For example, if the company pays out $20 million during a year, it wants to charge rates that recover the payouts along with a percentage profit. This loss data is collected at the state level since each state regulates insurance independently. State Farm has said that 70% of claims paid under its homeowner's program are nonfire losses, although it has not produced hard data to support this claim.

Therefore, in most jurisdictions across the country a better ISO rating will not provide lower insurance premiums for homeowners. Again, only commercial buildings not protected by automatic sprinklers receive the substantial benefit.

National Fire Protection Association

In the early 1900s, national and regional building and fire codes were developed in response to the loss of life and property occurring because of catastrophic fires plaguing many U.S. cities. The NFPA, which was formed in 1896 by insurance companies, was and still is the leader in national consensus fire, safety, and electrical codes. The first NFPA standard addressed uniform automatic fire sprinkler installation. Around 1913, in response to several fatal fires, the NFPA added a standard for Safety to Life in an effort to prevent fire-related deaths.

To this day, NFPA continues to create, update, and adopt codes and standards using a consensus method from committees that represent the fire protection community and the general public. The NFPA uses subject matter experts, including local, state, and national officials and public input to create consensus standards for firefighter training and education, equipment, and emergency operations with an emphasis on safety and efficient emergency service. These standards are updated on a schedule of every 3–5 years. The last step in approving a code or standard is a vote of its membership at a national meeting of NFPA. In addition, there is an appeal process to correct or add any justifiable changes.

For a full explanation of this process, the NFPA provides a comprehensive description in detail at its web page (https://www.nfpa.org/Codes-and-Standards/Standards-development-process/How-the-process-works). Anyone can participate, including the general public, either by attending the committee meetings in person or submitting in writing proposals and comments.

America Burning Report

In 1968, the **Fire Research and Safety Act** was created. This Act, which established the National Commission on Fire Prevention and Control, stated, "The [U.S.] Congress finds and declares that the growing problem of the loss of life and property from fire is a matter of grave national concern" (USFA, 1973). In 1973, the national effort to professionalize the fire service started with the Commission's **America Burning Report**.

The report influenced the development of several NFPA standards for training, safety, and professional qualifications of fire service members and hazardous materials response personnel. In total, the Commission formally listed 90 recommendations, including:

- Establish a national fire data system.
- Increase the research and medical facilities for burn treatment.

- Make fire prevention at least equal to suppression in planning priorities.
- Use women for fire service duties.
- Increase the use of automatic aid.
- Recognize advanced and specialized education in hiring and promotions.
- Provide federal financial help for planning, training, equipment, research, and fire safety education.
- Provide ambulance, paramedical, and rescue services where they are not provided by other agencies.
- Create the USFA and the National Fire Academy.
- Enforce adequate building and fire prevention codes.
- Require smoke alarms to protect sleeping areas and automatic extinguishing systems for high-rise buildings.
- Implement fire safety education in schools throughout the school year.
- Annually inspect homes for fire safety.
- Develop technology for automatic extinguishing systems for all kinds of dwellings, including single family.

Even though many of its recommendations have not been fully implemented, the report has been the basis for many of the changes in progressive FES organizations and continues to influence the modern fire service. Because of its continued relevance, the USFA updated and reprinted the report in 1989.

Development of Modern Emergency Medical Services

Modern emergency medical services (EMS) started with the 1966 publication of the paper Accidental Death and Disability: The Neglected Disease of Modern Society, by the National Academy of Sciences' National Research Council (National Academy of Sciences, 1966). This document pointed out an injury epidemic that was the leading cause of death among persons between the ages of 1 and 37, and served as a blueprint for a national effort to improve emergency medical care. These deaths were primarily the result of motor vehicle and work accidents that were the incentive for U.S. OSHA and the U.S. Department of Transportation (DOT) National Safety Act.

The report revealed that many ambulances and emergency medical treatment facilities were inappropriately designed, ill-equipped, and staffed with

FIGURE 1-3 Paramedics in action.
© Rawpixel.com/ShutterStock.

inadequately trained personnel. When the Highway Safety Act of 1966 established the Emergency Medical Services Program in the DOT, the DOT was given the authority to improve EMS through program implementation and development of standards for provider training **FIGURE 1-3**. States were required to develop regional EMS systems, and some of the costs of these systems were funded by the National Highway Traffic Safety Administration (NHTSA).

Through this federal agency, funding became available for training, equipment, and planning. At about the same time, a number of military medics were returning from the Vietnam War. They had experience with specialized emergency medical training, organization, and equipment that had never before been seen in any other military operation. These medics brought that experience, which included the use of medical air transport for rapid evacuation, to the field of prehospital care.

In addition, the war provided opportunity for trauma research, more effective tourniquets, chest seals, and bandages with clotting material. Even synthetic blood and intravenous solutions that can carry oxygen have now been field tested because of war experience. Prehospital care has benefitted from this improved equipment and the resulting procedures.

In 1971, another phenomenon changed the general public's attitude concerning the fire service and emergency medical care. When the television show Emergency! aired for the first time, there were only six regions in the country providing paramedic service: Seattle, Miami, Jacksonville, Los Angeles City and County, and Columbus. By 1978, a mere 7 years later, there were more than 300 regions providing EMS. The show Emergency! generated an increased interest in providing EMS and paramedic service by local governments and effectively launched the careers of thousands of fire and EMS personnel throughout the

country. Television has a strong influence on the general public, including politicians, resulting in demand and funding for paramedic programs. This was especially true for this popular TV show.

In 1999—more than 20 years after the show's debut—Project 51, a website dedicated to the show and its cast, stated, "Who would have guessed that the humble beginnings of the Mobile Intensive Care Unit would evolve to one of today's most recognized emergency based services, and one that is used most routinely by millions of people" (Project 51, 1999). The show had more to do with the fast adoption of advanced and basic EMS by the fire service, hospitals, and ambulance services than anything that had come before.

However, although *Emergency!* was visionary, it was not a completely accurate portrayal of the state of EMS at the time. For example, it suggested that paramedics existed everywhere, which was not true in the 1970s. It also portrayed paramedics as having frequent success saving lives, which may have led to unrealistic expectations. Even today, portrayals of EMS in television, movies, and other media may create unrealistic perceptions and expectations regarding EMS, such as high success rates for heart attacks, etc. This causes problems with depression of EMS providers who expect to save every patient and with the public that expects emergency medical miracles on every call.

FES Professional Standards

To develop a professional service organization—one whose members are trained and qualified—FES professionals must rely on recognized national or international fire and emergency standards of competency. In the fire service, this effort is led by the NFPA.

Fire Standards

NFPA publishes voluntary codes and standards that cover fire department professional benchmarks for firefighter training, safety, and emergency operations, including planning tools for fire station location and response times. These codes and standards to be legally enforced must be adopted by a state or local government. In many cases, they are implemented locally by voluntary compliance. For example, in 2001, an NFPA committee finished work on a new standard—1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*—which measures fire and EMS deployment, response times, and staffing (NFPA, 2016). This standard is commonly used as a planning tool to help improve the professional and

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CASE STUDY

The Need for National Standards

In a tragic example of not learning the lessons of history, 25 people died and nearly 3,500 homes were destroyed in a large wildfire in Oakland, California, in 1991. Surrounding jurisdictions that responded to the mutual aid call were unable to connect their hoses to the Oakland fire hydrants, severely handicapping firefighting capabilities. Even today, many FES cannot communicate with one another because of different radio channels and systems of communication. Progress in this critical area has begun with funding and radio spectrum allocation for a new nationwide system called FirstNet. ATT is the partner and contractor for the implementation. Further efforts are needed to standardize fire service equipment, training, and communication. Adherence to national standards is necessary to keep fire departments up-to-date with personnel, equipment, and training.

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effective operation of a fire department that includes safety of firefighters.

Expert fire protection consultants can also be hired to study and make recommendations on any aspect of a FES organization; this practice is discussed in more detail in the chapter *Public Policy Analysis*. This can be a necessary step in policy analysis to implement these standards for a local jurisdiction. In most cases these changes would result in employee and officers altering existing policies, causing resistance. In addition, many need additional funding that can be justified by an outside expert consultant.

EMS Standards

Within the field of EMS, the path toward national unifying standards began with the nationally recognized EMT-A curriculum created by the National Highway Traffic Safety Administration (NHTSA) in 1969. The field of EMS quickly grew with the Statewide EMS Technical Assessment program initiated by the NHTSA in 1988, along with the Trauma Care Systems Planning and Development Act of 1990. These efforts provided guidelines for a trauma system to address the needs of injured patients and match them to available resources. Local EMS authorities were vested with the responsibility of establishing trauma systems and designating trauma centers in their areas, and states were encouraged and given funds to develop inclusive trauma systems.

In 1991, the Commission on Accreditation of Ambulance Service began administering an EMS accreditation program that is still used today. This program is a comprehensive self-evaluation analysis with the main objective being to provide quality and timely EMS to the community.

In 1994, the National Standard Curriculum, a national training model developed by the DOT, was developed and included examinations, skills sheets, and evaluation tools from the National Registry of EMTs, the entity that conducts testing for national EMS certification. This is still a work in progress as some states have their own EMS certification systems and do not recognize the national certifications or those of other states.

Federal Involvement

Federal agencies, such as the **Federal Emergency Management Agency (FEMA)**, along with the Departments of Defense and Homeland Security and the Federal Bureau of Investigation, provide training, equipment, and resources to prepare local FES organizations for terrorist activities, weapons of mass destruction, and other extremist violence. The Environmental Protection Agency, a major regulator of hazardous substances, has created regulations for storage, use, and transportation of hazardous materials. OSHA has developed rules to protect fire and EMS personnel against the hazardous materials that they come into contact with in their jobs. The USFA and its National Fire Academy also provide valuable training and education for the fire service, although their impact has been limited as a result of insufficient federal budget support.

However, the federal effort continues to expand as a result of the September 11, 2001 terrorist attacks on the United States, which led to increased national attention and prestige for FES. These federal programs continue to play an important role in creating a path to national uniformity by stressing curriculum, ideas, management, and leadership practices that prove to be successful, including providing a path to the interoperability between jurisdictions.

Melding of Fire Service and EMS

Over time, the role of the fire service has expanded greatly beyond fire suppression to include medical response, fire prevention, natural disasters, and public education. Citizens now depend on the fire department to protect them against the dangers of fire, entrapment, hazardous materials, emergency medical incidents, and explosion, and to come to their aid in any emergency event that might occur in the community. Domestic acts of terrorism, such as those in Oklahoma City, Orlando, El Paso, Parkland, San Bernardino, and New York City, have added a new mission of safe and effective response to terrorist events for the fire service. As such, the job of the chief officer is becoming more complicated and challenging every day.

With the recognition that firefighters are dedicated to saving lives and are strategically positioned to deliver timely response, fire service–based EMS have gained popularity. Currently, four levels of EMS providers exist: (1) emergency medical responder, (2) emergency medical technician, (3) advanced emergency medical technician, and (4) paramedic. Firefighters may or may not be trained to an EMS level of certification, and fire departments may or may not provide ambulance transport. This varies considerably throughout the nation and is usually based on local policy.

On a national level, nearly 60% of fire departments provide some EMS. Those that do not are mostly all-volunteer departments serving areas with small populations that do not have sufficient resources to provide EMS. In many areas, volunteer fire departments have trouble recruiting and retaining members, so there is concern that the additional demands of a volunteer's time to train for and provide EMS might discourage membership.

Unified Federal Emergency Response

After a series of devastating fires in New Hampshire in 1803, the U.S. Congress passed a measure that provided financial relief to the affected New Hampshire residents. This measure is considered the first piece of legislation passed by the federal government that provided relief after a disaster. Over the years, the federal government created various other programs to fund recovery from disasters, including flood control by the U.S. Army Corps of Engineers.

During the 1960s and 1970s, such major disasters as hurricanes and earthquakes brought focus to this fragmented approach to federal disaster assistance **FIGURE 1-4**. In 1979, FEMA was established to consolidate the federal disaster response, which at the time included the USFA and the Civil Preparedness Agency in the Defense Department. With the end of the Cold War, resources once allocated to civil defense were redirected to support disaster relief, recovery, and mitigation programs. FEMA started programs to prevent and reduce the risk before a disaster struck.

FIGURE 1-4 Hurricane damage.
© Leonard Zhukovsky/ShutterStock.

Currently, the agency is focused on preparing and delivering training to mitigate and recover from terrorist incidents.

The U.S. Forest Service, under the Department of Agriculture, also played a crucial role in developing the ability to provide a unified emergency response through the help of two key initiatives: the development of the National Interagency Incident Management System—now called the **National Incident Management System (NIMS)**—and the red card system. The Forest Service developed the National Interagency Incident Management System in the early 1970s to ensure that fire protection agencies were prepared and organized to be able to fight destructive wildfires in southern California. In the red card program, firefighters who are assigned to a wildland fire managed by a federal agency (U.S. Forest Service, Bureau of Land Management, National Park Service, Bureau of Indian Affairs, or U.S. Fish and Wildlife) or by many state agencies are required to have a red card, which documents the current wildfire qualifications of an individual. In a sense, it is similar to a driver's license. The credentials specify levels of competency, including firefighting and incident command, achieved by successfully completing training and testing to a national standard.

This credentialing system is remarkably effective and prepares firefighters from all over the country to work together, efficiently and collaboratively, on large wildfire firefighting efforts. For example, a wildland firefighter from North Carolina can travel to Wyoming and be assigned to a team made up of individuals from all over the country because there is a national system of competency credentialing.

On November 22, 2002, the federal government took the effort for emergency response a step further with the establishment of the U.S. Department of Homeland Security (DHS). At the time, threats against the United States were growing in magnitude, and the DHS was created to protect American citizens from terrorist attacks. In 2003, FEMA became part of the DHS and continues to be the nation's incident manager for all hazards and major disasters. This command system provides a direct line of authority and communications from the President of the United States—by way of the Secretary of Homeland Security—down to the local level.

The number one priority of the DHS is to prevent the occurrence of a terrorist attack. The same goal is also very important to fire and EMS providers, because preventing problems has always been more effective than responding to an emergency in progress. Traditionally, however, prevention has not been a major priority with most emergency services. In December 2008, the DHS released its NIMS. This system supersedes all previous emergency management systems when the federal government is involved and is the default system in the United States. In responding to future disasters, a plan that details mutual aid across jurisdictions and state lines using the incident management command system will be a top priority.

In addition, there are now more mutual aid agreements being signed to prepare for major emergency incidents that could result from terrorist actions and catastrophic natural disasters. National credentialing efforts for first responders are being developed with the support of the DHS.

Although DHS has not implemented a national credentialing system at this time, several state, regional, and local government credentialing programs have been created to provide real world case studies. When large scale emergencies occur and first responders from distant jurisdictions respond to assist, the resources and staffing have to be identified, including skill and competency levels. This is especially true for a terrorist or major weather incidence.

As successful as these efforts have been, greater standardization among fire departments is still necessary to ensure departments and individual responders are able to work together safely and effectively. The NFPA and DHS are continuing to develop standards and initiatives to improve the fire service's ability to present a unified emergency response. These include NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program* (NFPA, 2018) and NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* (NFPA, 2016).

When many different emergency services departments come together to respond to national events, effective management is critically important. According

to *NFPA Fire Protection Handbook*, "The absence of incident command at an incident scene puts firefighters at great risk and is one of five leading contributing factors of firefighter fatalities, as reported by the National Institute of Safety and Health" (NFPA, 2008). Therefore, incident scene management is critical to the successful mitigation of large- and small-scale emergencies and the health and safety of emergency responders.

Critical to incident scene management is the ability to communicate to other responders and their dispatch centers using mobile two-way radios. Currently, there are around 10,000 different and incompatible mobile radio emergency services networks in the United States. A new effort by the Federal government, FirstNet, is the nationwide public safety communications system dedicated to America's first responders. Congress allotted $7 billion and 20 MHz of valuable radio spectrum to build the network. This effort is a work in progress and does not incorporate voice communications at this time.

Current Problems Facing Fire Service and EMS

Although the fire service in the United States has come a long way from its local beginnings to create a system of national standards and unified emergency response, there are still many areas where further professional progress is needed. The modern fire service is continuing to work toward measurable outcomes for firefighter and fire officer training, certification, education, and physical fitness standards nationwide.

There are still many challenges to be faced, including breaking down traditional ways of operating and getting officials to help set emergency management priorities. A few specific challenges are mentioned in the following sections.

U.S. Fire Experience and Trends

Trends on a yearly basis may be misleading so it is always helpful to look at a multi-year analysis such as:

		Trend from 2008 to 2017
FIRES	1,319,500	−6.2%
DEATHS	3,400	+9.6%
INJURIES	14,670	−15.8%
$LOSS*	$23.0 billion	+12.0%

* Adjusted to 2017 dollars; includes $10 billion in losses from Northern California wildfires.
Data from National Fire Protection Association for more statistics on U.S. fire loss.

See: National Fire Protection Association for more statistics on U.S. fire loss.

After looking at these U.S. statistics you may ask the question, "Why are fire deaths up 9.6% over this 10-year period?" This is a great observation and is something that should be investigated by NFPA and other national fire research organizations to determine a cause(s). Once a cause (not always just one) is identified, then appropriate fire prevention measures would be suggested. At the local level the fire administrator may want to strengthen or implement programs such as smoke detector battery replacement or installations, for example. This may also indicate that modern furnishings are more flammable and that residential sprinklers should be considered.

We have solid statistical evidence that these smoke detectors have been very effective at lowering fire deaths historically. From 1980 to 2016 U.S. fire statistics documented a 63% drop in fire deaths. Smoke detectors are now installed in over 90% of homes. The other major contributor to this reduction was a sharp decline in fires started by smoking materials. This was the result of two factors: fewer smokers and, more recently, fire safe cigarettes. This trend is also supported by the present statistic that 51.6% of residential fires were caused by "cooking" in 2017 and that was the biggest cause. A more in-depth discussion of the use of trends and statistics can be found in Chapter 12, *Public Policy Analysis*.

Challenges of the Modern Fire Service

In 2016, the NFPA conducted research on fire-related trends and statistics and noted a number of issues relating to smoke alarms. To begin with, 38% of all home fire deaths reported occurred in households without smoke alarms. What is even more concerning is that, although most households in the United States have at least one smoke alarm, these alarms were found to operate correctly in only about half (40%) of reported home fires (NFPA, 2015). This is a trend that the fire service will have to continue to battle.

A more recent NFPA study conducted in 2016 found the following additional concerns regarding the U.S. Fire Service's needs and response capabilities. A few highlights are listed below:

- Two out of five (43%) fire stations are at least 40 years old, up from 32% in 2001.
- There is an increasing need for additional stations in both the largest and smallest communities.
- Only one quarter (27%) of fire departments have a basic firefighter fitness and health program.

- Twenty percent of fire departments did not have anyone conducting fire code inspections in the community, down from 24% in 2010.

- Nine percent of departments reported that they could not communicate via two way radio with their response mutual aid partners at an incident scene, lower than 13% in 2010.

- Forty-nine percent of all fire departments in 2015 have not formally trained all of their personnel involved in structural firefighting, up from 46% in 2010. However, 67% of these formally untrained departments serve under 25,000 residents.

- Except for cities protecting populations of greater than 500,000, most cities do not assign at least four firefighters to an engine or pumper company and are probably not in compliance with NFPA 1710, which requires a minimum of four firefighters on an engine and pumper companies (NFPA, 2016).

- The greatest FES educational needs for the public were the following (NFPA, 2016):
  - A wildfire safety program based on a national model (84% of the U.S. population without a program)
  - Home fire sprinkler education (74%)
  - Car seat installation (70%)
  - An older-adult fire safety program based on a national model (67%)
  - Home safety visits (54%)
  - A youth firesetter program (48%)
  - Cardiopulmonary resuscitation instruction (42%)
  - Free installation of home smoke alarms (37%)
  - A school fire safety education program based on a national model curriculum (32%)
  - Fire prevention week activities (14%)

Challenges of the Modern EMS

A common challenge of modern EMS is that some of the country still cannot access EMS by calling 911, and people place many unnecessary 911 calls. Fees charged for transport are paid by Medicare, Medicaid, and private health insurance, or not paid at all. Just like anything that is free, emergency transport is demanded more often than it is actually needed. As stated by Pratt, "Prehospital 9-1-1 emergency patient medical care is a major part of the safety net for the American healthcare system. They might be the provider of last resort for the needy, yet they can be one

more mechanism for overloading the health care system" (Pratt et al., 2007, 14). The easy access of ambulance transport that is common in most densely populated areas results in high numbers of noncritical patients requesting medical care. Because emergency rooms cannot turn anyone away from medical care, they are overtaxed and may have to turn real emergencies away to an ER many miles away.

At the present time, fees can be charged only for transportation of a patient and not for emergency medical care provided by first responders. As a result, there are many private ambulance companies providing EMS care for free along with transport. The Patient Protection and Affordable Care Act of 2010, which is reforming the nation's healthcare system, does not have any specific requirements for EMS but contains regulatory authority for a federal agency to write rules affecting EMS providers. Many of the specifics of this legislation have not been implemented or are not fully understood. This Act is evolving and might be changed or repealed in the future. The Trump administration is supporting a legal constitutional challenge to this act and it has been found to be unconstitutional by a lower federal court. At the present time it is in an appeals court for review. More to follow.

Financial Challenges

The financial pain of the recession that started in December 2007 continued for many years. The U.S. economy is just now experiencing a substantial comeback. In the aftermath of this recession, a wave of political action with a distinct antitax and antigovernment sentiment swept the country. One leading example of this backlash occurred in Wisconsin in 2011. The state passed legislation that limited bargaining rights for public employee unions. The legislation also increased state employees' contributions to retirement and health insurance. Numerous other states are in economic peril and will have to take similar actions in the near future.

There are many persistent sources of concern for the U.S. economy, such as unprecedented deficits. Although the unemployment rate is falling to record lows and the gross national product is very healthy, the federal deficit keeps rising, with the total cost per taxpayer of more than $189,000 at this time (to access the latest numbers, go to https://usdebtclock.org/). The danger that inflation and increasing oil prices might cripple the economy is always present. And, finally, a worldwide pandemic is causing substantial damage to the United States and world economies. The overall extent of this pandemic, COVID-19, is not known at this time

but has and will affect operations and funding of FES departments.

Unions will face several dilemmas in the future. Issues that are part of this discussion include:

- Union bargaining rights
- Supreme Court limits public sector unions from collecting fees from non-members
- Employees' salaries and benefits
- Revenue from EMS transport service
- Consolidations
- Reducing either staffing or stations (or both)

The only thing that is for certain is that change will happen.

Today's Fire and Emergency Services

What is the status of today's FES? Often, there is a large gap between the public's perception and the reality that many FES leaders encounter. Veteran chief fire officer Dr. Harry Carter states, "The fact is these leaders do not have the staffing, equipment, or most importantly, the financial support to back up their claims. Sadly, far too many of our folks in positions of leadership use their education and training to weave an intricate web of falsehoods and deceit. These folks are unwilling to face reality and provide a true assessment of their agency's capabilities to their citizens and their local governments" (Carter, 2005). Dr. Carter points to many departments that run fire companies with one, two, or three firefighters. This does not meet the minimum requirement of four firefighters as listed in several national standards, a requirement that was validated by a 2010 scientific-based study at the National Institute of Science and Technology (NIST) that showed that the size of firefighting companies largely affects the company's ability to protect lives and property (NIST, 2010). Dr. Carter also cites the example of Hurricane Katrina's aftermath, which exposed numerous issues involving mutual aid response, including failures of local, state, and national plans for catastrophic incidents.

As is true in any profession, there is always room for improvement; however, a number of positive trends should be recognized. For example, although careless smoking habits are a leading cause of fire deaths, these deaths are decreasing thanks to the increased effectiveness of smoke alarms and a decrease in the number of smokers (from 42.4% in 1965 to 15.5% in 2016). In addition, the Coalition for Fire-Safe Cigarettes has worked to save lives and prevent injuries and devastation from cigarette-ignited fires through state passage of fire-safe cigarette legislation. A report released by the NFPA on July 2013 stated that "the long-term trend in smoking-material fires has been down, by 73% from 1980 to 2011, helped by the decline in smoking, the effect of standards and regulations that have made mattresses and upholstered furniture more resistant to cigarette ignition, and more recently, the adoption of fire-safe cigarette requirements throughout the country" (Hall, 2013).

Furthermore, fire departments are now placing more emphasis on fire prevention, specifically through the use of modern building and fire codes. Automatic sprinklers, long used for property protection, are very effective tools for reducing or preventing loss of life or property (Evarts & Stein, 2020). In addition, fire safety education, which was started in the 1970s, has now become part of many schools and fire departments. Public safety education by fire departments includes information about vehicle accidents, swimming pool and water safety, and other common accidents that cause injuries and deaths (Evarts & Stein, 2020). There is also the trend of departments adding new services, such as rescue, hazardous material response, emergency preparedness, and EMS.

Still, the chief officer should never underestimate the difficulty of making changes. Preparation is the key to success. Remember to review the beginning of this chapter to provide background to contemporary issues. If we do not study history, we are doomed to repeat the same mistakes or discount successful solutions. Useful solutions to common FES issues, and techniques to implement change, can be found in the following chapters. The first step in preparation is being informed and educated in identifying a problem **FIGURE 1-5**.

FIGURE 1-5 Fire chief talking to firefighters.
© Jones & Bartlett Learning. Photographed by Glen E. Ellman.

Wrap-Up

CHAPTER SUMMARY

- There are many lessons to learn from the history of fire and emergency services. Consider the famous quotation by William Shakespeare that "the past is the prologue to the future" as really good advice.
- From many organizations and individuals, numerous progressive changes have been discovered and adopted to make up the present day FES.
- More changes are sure to be discovered by analyzing problems, including solutions in the FES.
- No FES organization is an island unto itself. Look to the FES community at-large to coordinate and identify problems and solutions for common issues.

KEY TERMS

Accidental Death and Disability: The Neglected Disease of Modern Society 1966 publication that serves as a blueprint for the national effort to improve emergency medical care.

America Burning Report A compilation of 90 recommendations issued in 1973 by the National Commission on Fire Prevention and Control that began the national effort to professionalize the fire service.

Commission on Fire Accreditation International A self-assessment process that measures fire department capabilities, response times, and compliance with nationally recognized standards.

Federal Emergency Management Agency (FEMA) The nation's incident manager for all hazards and major disasters, run by the Department of Homeland Security.

Fire Research and Safety Act 1968 legislation that established the National Commission on Fire Prevention and Control.

FirstNet The nationwide public safety communications system dedicated to America's first responders.

Insurance Service Office (ISO) Grading Schedule A document that grades municipalities from Class 1 to 10 based on 1 being the best and 10 indicating long response times and no water supply.

International Association of Fire Chiefs (IAFC) "The International Association of Fire Chiefs (IAFC) represents the leadership of firefighters and emergency responders worldwide; our members are the world's leading experts in firefighting, emergency medical services, terrorism response, hazardous materials spills, natural disasters, search and rescue, and public safety policy" (https://www.iafc.org/about-iafc).

National Board of Fire Underwriters "The National Board of Fire Underwriters was a group established in 1886 with the aim of preventing loss from fire and to protect property and lives from fire-related harms. It gathered statistics from fire incidents across the United States to provide a template for fire insurance" (https://www.insuranceopedia.com/definition/3060 /national-board-of-fire-underwriters).

National Fire Protection Association Group that uses fire service experts and public input to create consensus standards for firefighter training and education, equipment, and emergency operations with an inclusive emphasis of safety and efficient emergency service.

National Highway Traffic Safety Administration The NHTSA is responsible for keeping people safe on America's roadways. Through enforcing vehicle performance standards and partnerships with state and local governments, NHTSA reduces deaths, injuries, and economic losses from motor vehicle crashes (https://www.nhtsa.gov/about-nhtsa).

National Incident Management System (NIMS) The default emergency management system in the United States.

REVIEW QUESTIONS

1. Describe how the fire in Baltimore in 1904 led to most fire department's interagency cooperation that we see today.

2. Look up the ISO Grade for your municipality. How do you think this affects individual homeowners, corporations, and fire departments in your area?

3. The chapter describes how the TV show *Emergency!* affected Americans' perception of EMS. Describe how a TV show or movie you've seen has influenced your perception of the FES.

4. List and briefly describe at least four government agencies that oversee FES as well as what kind of standards they control or influence.

5. What do you think is the greatest challenge facing the modern FES? Explain.

CHAPTER ACTIVITY #1: AN EXAMPLE OF PROGRESS—MAYBE?

When the DHS promulgated the NIMS (command and control at large scale emergencies), there were those in the FES community who opposed it. Some noted that it was not designed to address the multi-alarm fire command system that was typically used in parts of the country.

Another problem identified was that no common terminology for fire and EMS resources existed. One simple example is the definition of the basic unit of a fire department: the engine company. The name of this unit can vary by department, such as engine, pumper, wagon, or unit. One state plan has the following definition of a Type I Engine: 1,000 GPM (3785 L/min) pump, 750 gallons (2838.75 L) of water, 1,200 feet (365.76 m) of supply hose, 200 feet (60.96) of handlines, and four firefighters. Each firefighter on a Type I Engine must be state-certified as a FireFighter II. Even in this state, many departments do not conform to this standard.

The NIMS currently does not specify minimum qualifications and certifications for personnel, and no consensus or consistency exists in the fire service for determining competency of fire personnel. Although a few states have mandatory firefighter certification systems, most fire departments operate independently, and each decides how to train its members.

Discussion Questions

1. Do all FES organizations have to comply with the federal emergency management plan?

2. Would your department's engine companies measure up to the Type I Engine requirements listed previously? If not, would your department change, or do you think that the requirements are not realistic and should be changed? Please provide a complete justification for your answer.

3. Are there any major differences between the plan outlined in the DHS document and your department's standard operating procedures for incident management? If so, please list the differences.

4. After reading the FEMA document, what challenges do you see in your fire or emergency services agency's ability to respond to a large catastrophic event? Please provide a detailed point-by-point analysis.

CHAPTER ACTIVITY #2: A SECOND EXAMPLE OF PROGRESS

In 1976, the U.S. General Services Administration identified minimum requirements for new EMS ambulances, and medical equipment companies began catering to the prehospital EMS market. As a result, patient care devices became smaller, lighter, and more efficient. Local governments standardized patient care protocols within their jurisdictions based on state and national requirements and recommendations. Original patient care protocols were based on what little research had been done at the time. Data collection from paper patient care reports was difficult to understand, and the information acquired was incomplete and often inaccurate.

In the mid-1990s, electronic data collection systems, made possible by advances in medical equipment, came into use. With the ability to collect good data and the emergence of quality improvement programs to evaluate data, EMS providers learned that some accepted patient care practices were not only ineffective, but potentially harmful. Today, decisions concerning diagnostic and therapeutic equipment and patient care protocols are based on research

showing accurate, definitive conclusions about the effectiveness of a product, drug, or treatment

protocol. This practice is known as "evidence-based medicine."

Discussion Questions

1. Evidence-based medicine has changed long-held beliefs in patient care treatment. How has evidence-based medicine changed EMS protocols in your community?

2. Are the EMS protocols the same in adjoining cities, the county, or the state? If no, why not?

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Introduction to Administration

LEARNING OBJECTIVES

After studying this chapter, the student will be able to:

- Recognize how both management and leadership are integral to effective administration (pp 18–19).
- Outline professional qualifications for fire and emergency medical services (EMS) administrators (pp 19–20).
- Comprehend how problems caused by staff–line distinctions can be overcome (pp 20–21).
- Describe the pros and cons to selection of administrators through the process of election or appointment (pp 21–22).
- Examine how national consensus standards and standard operating procedures (SOPs) affect the consistency and effectiveness of emergency services (pp 23–24).
- Know the value of direct supervision and standardization in firefighting and EMS (pp 24–25).
- Explain how administrators can work to bring about change and what common challenges they face (p 25).
- Describe how to gather feedback from staff members and peers as part of the decision-making process (pp 25–27).
- Recognize how to engage influential sources of power, including tradition, political groups and individuals, unions, and the public (pp 27–32).
- Explain how to gain influence over the political process (pp 28–30).
- Discuss the process and challenges of negotiation (pp 33–34).

Case Study

Resolving Staff Divisions

In 1996, the Madison, Wisconsin, Fire Department made a decision to reduce its budget by decreasing the number of division chiefs and combining staff and line functions. Madison's Assistant Fire Chief Phillip Vorlander recognized that the distinction between line and staff functions had created divisiveness in the department, alienating shift commanders from other administrators. The department changed its organizational structure so that each battalion chief worked two 24-hour shifts and six 8-hour shifts per 2-week period. Between the 8- and 24-hour shifts, each battalion chief spent 4 days a week serving as a staff supervisor.

With this new organization, staff officers were more able to participate in the administrative decision-making. This increased the quality of the decisions and their acceptance, and the commitment to the management team. This structure also had a positive effect on the cohesiveness of the department because chief officers no longer had allegiance to a particular battalion, division, or shift (Vorlander, 1996).

Discussion Questions

1. In your department (or a department in your vicinity), are staff and line functions separate? If yes, would departmental decisions be better accomplished by obtaining input from all officers?

2. In the traditional organization of a fire department, would mandatory transfers of battalion chiefs have a positive effect on administrative decision-making?

3. Although not mentioned in the Madison case, would input from all personnel be helpful? If yes, give one example.

4. Identify three techniques to improve decision-making in a multi-station department.

JONES & BARTLETT LEARNING NAVIGATE *Access Navigate for more resources.*

Combining Management and Leadership

Effective **administration** requires two skills: management and leadership. **Management** ensures that the organization is prepared and able to accomplish its goals by establishing that sufficient personnel and equipment are available for the organization to perform its duties. **Leadership** can be observed when trained personnel safely and efficiently complete their mission using the resources provided by the fire and emergency services (FES) organization. At the organization level, leadership is required to "sell" new programs, the need for additional resources, or progressive changes. After the resources become available or the new change is implemented, effective management is needed to use them to support the mission. Administrators should possess management and leadership skills, even if they feel more comfortable in one of the roles than the other, which is common.

A person who excels in management skills will be very good at making the existing organization work efficiently. Many U.S. companies have trained great managers who propelled the country to the top of the industrialized world. For example, Disney—a great visionary company—had a period of time when the management was focused on increasing profits and dividends for stock owners in lieu of truly visionary media products. This caused a decrease in truly innovative new entertainment products. Although this sequence of events does not occur in every organization, it is common in many industries. For instance, management-oriented people generally represent most **chief officers** in FES organizations. Management skills are necessary for this role, because the chief officer often needs to be a good caretaker of public funds, staff, and resources.

However, managers may not be proficient at leadership. A person with strong leadership skills has a clear vision of where the organization needs to go and the courage to attempt the journey. There is no guarantee that the leader will arrive at the visionary goal, but because good leaders are inherently risk takers, they try anyway. Conversely, good leaders may not be good managers because they typically are not detail oriented and may miss those items that must be completed to achieve the overall goal because they are big picture visionaries. A leadership-oriented administrator may focus on a visionary goal 5–10 years down the road but forget to plan for tomorrow. In contrast, a

management-oriented person generally is not comfortable with risk taking and would rather not get involved in visionary goals that have no guaranteed outcome. Managers may try to implement change slowly or make it voluntary; be aware that a voluntary plan can foster inconsistencies because members and supervisors set their own goals. When the voluntary phase results in a commitment of 10% to 15% or more members, this is a good time to phase in a mandatory policy.

A leadership-oriented person is more of a risk taker when it comes to new ideas and change. Many people drawn to the FES have a reduced sense of fear and are risk takers in physical actions. There is an old saying that highlights the heroic behavior of firefighters: when firefighters are entering a burning building, everyone else is leaving it. However, when it comes to changes in the organization, fear of the unknown may make many FES and EMS chief officers reluctant.

Although these descriptions of leadership and management may be oversimplifications, it is important for administrators to recognize the value of management and leadership skills and work to develop them through formal education, self-study, seminars, mentoring, and experience. The National Commission on Fire Prevention and Control's *America Burning Report* of 1973 further comments on the duality faced by the chief officer:

> Presiding over this tenuous alliance [fire department] is the fire chief, who wears two hats—one, the administrative hat required to run the organization; the other, the helmet he dons when the alarm is sounded to lead his firefighters in the suppression of a fire. Because the fire chief usually has come up through the ranks, the second hat probably fits comfortably (United States Fire Administration, 1973).

The *America Burning Report* uses the term *leadership* when discussing the ability to lead firefighters at the scene of an emergency incident. In this text, the term *leader* is used at the organizational or administrative level, which calls for a special set of skills and knowledge. Leaders are problem solvers; therefore, this text discusses the many aspects of problem solving. More precisely, this text is about the very special challenges to problem solving and/or policy choices that FES and EMS chief officers encounter in the public sector.

Professional Qualifications for Administrators

Career and volunteer organizations sometimes struggle with selecting the best person for the chief officer's

position. Whether the person is elected or appointed, the result may be the same: the administrator (chief) may be ineffective and in some cases disruptive to the organization. FES is evolving as a profession, and the selection of chiefs should strive to be similar to other professions, such as doctors, engineers, and lawyers.

Professional qualifications for fire and EMS administration include three areas of competency: (1) training, (2) experience, and (3) education. In all three areas, fire and EMS administrators should meet minimum levels of proficiency; these minimal qualifications should be the same throughout the country, just as they are for medical, engineering, and legal professionals. For example, a medical doctor must complete college-level education and medical school, and then an internship/residency (training and experience). Only after completing these requirements and passing a comprehensive examination is the doctor granted a license to practice.

Many FES organizations can improve their departments' reputation and ability by adopting minimum professional requirements for officers. Although this is a complex and controversial subject, the following are some examples of recommended requirements for fire administrators:

- Minimum of 3 years of experience at each prerequisite level—firefighter and fire company officer
- Certification as a Fire Officer III or IV
- Training and certification as a Fire Fighter II and Fire Instructor I
- A degree from a regionally accredited college or university that is recognized by the U.S. Department of Education (an associate degree for smaller departments—those with less than six stations—or a bachelor's degree for larger departments)

HIGHER EDUCATION TIP: REGIONAL ACCREDITATION VS. NATIONAL ACCREDITATION

Generally, "regionally" accredited higher education institutions (colleges and universities) are preferred and are typically more academically rigorous. Nationally accredited schools are predominantly for-profit and offer vocational, career, or technical programs. When considering higher education institutions, it is usually better to attend a "regionally" accredited school.

EMS administrator qualifications are not as standardized as those of fire departments and vary across companies or positions. The three areas of competency—training, experience, and education—may be less defined in the EMS world. Fire departments have a hierarchical structure based on standardized training, but this is not the case with many private ambulance companies, because EMS supervisors have no national oversight organization to define those supervisory standards.

Ambulance companies may offer supervisor or management positions to paramedics with comprehensive field experience, but they may not require management experience or higher education. A paramedic who may be an excellent clinician does not necessarily have the skill set to be a competent administrator. The extent to which a new supervisor, manager, or administrator is offered training opportunities also varies greatly from company to company and may be considered the responsibility of the individual.

As EMS professionalism continues to increase, qualifications for management positions are becoming better defined. Common and preferred requirements for EMS administrative positions include:

- High school diploma or GED equivalent (college degrees may be preferred)
- Advanced Cardiac Life Support and professional-level cardiopulmonary resuscitation certification, with specialized training (e.g., hazardous materials, emergency vehicle operator, National Incident Management System, International Trauma Life Support, Pediatric Advanced Life Support) preferred
- EMT-P license and state driver's license
- Three to five years active prehospital experience, with supervisory experience preferred

Staff–Line Distinctions

Most FES organizations have a distinct dividing line between staff and line functions. This classification is especially apparent in larger departments where it is common to have specialized divisions, such as fire prevention, training, dispatch, logistics, or human resources.

There are several reasons why this traditional organization can cause conflict, especially when those on the line are asked to move into staff positions. First, firefighters and EMS providers often enjoy working at emergency incidents, so they may resist a transfer to staff positions if doing so takes away their ability to respond to emergency calls. Second, the crew can almost become a second family, and individuals may

be hesitant to leave that family to move into staff positions. In addition, the daytime work schedule often required in staff positions may not be appealing for those who have second jobs or enjoy having extended time off. In the common 24-hour shift, an employee works for 24 hours straight, and then is off for 2 or even 3 days. Firefighters and paramedics might become comfortable working this shift and look forward to having time for their second job, family, or social commitments.

To address these concerns, some organizations have combined the staff–line jobs at the mid-supervisory level. For example, a fire department may have a **battalion chief** in charge of each shift. This same battalion chief would also be assigned to supervise certain staff functions. During the weekday, the battalion chief is the administrative head of prevention but is available to respond to major emergencies when needed. Another alternative organizational strategy is to rotate command officers every few years to supervisory positions of both staff and line divisions. Serving in different commands ensures that the next chief officer has a well-rounded knowledge of the entire organization.

CHIEF OFFICER TIP

Tips for an Outstanding Reputation

The following is a list of suggestions for how a chief officer can build an outstanding professional reputation:

- Build a solid experience base, starting at the lowest level and moving up through the ranks. In small organizations the chief may have to help out and, therefore, should still be skilled in basic emergency tasks.
- Take advantage of every opportunity to learn the skills and knowledge of the job through hands-on experience and training.
- Keep in the best physical shape possible; this includes strength, aerobic fitness, and body weight within recommended limits. Even if the chief officer no longer has to perform physical skills, fitness is a great area to lead by example.
- Acquire a formal education, especially through programs that lead to an associate's or bachelor's degree in fire science, administration, management, and other job-related areas. For larger departments, a graduate degree would be beneficial.

- Stay up-to-date by attending seminars and conferences, and by reading FES, government, and management periodicals.
- Read local newspapers, web sites, and publications from influential organizations. Be familiar with all controversial issues in the community, not just those that relate to FES.
- Visit other FES organizations and learn from their experiences and progressive ideas.
- Have high personal and professional standards for ethics and morality.
- Be very careful not to lie, including misinformation and omissions that would affect credibility. It is very difficult to recover from this damaging issue.
- If appointed to a top position, choose your initial proposed changes carefully. Choose only those changes that are certain to succeed. It is very important to start out as a winner.
- Last, but perhaps most important, lead by example.

A similar model may be found in EMS organizations. Paramedic or **emergency medical technician supervisors** are much like battalion chiefs in terms of job function and span of control. During a 24-hour shift, they might be responsible for administrative tasks, meetings, and field oversight and also might be expected to respond to certain types of calls or function as a provider when staffing levels are low.

Some companies have a controversial rule requiring supervisors to staff an ambulance while supervising some staff functions. Some EMS providers believe that, although supervisors should be required to maintain field skills and certifications, there should be a clear distinction between staff and line roles. In addition, union affiliation may create some conflict, because in many companies field providers are union members but supervisors are not members. This is a typical division found in many union organized companies where supervisors are separated from the workers. In companies where union field employees work as part-time supervisors, they may be restricted in their ability to discipline other field employees, handle sensitive company information, or investigate complaints.

Selection of Administrators

Most fire and EMS administrators are selected by election or appointment. Both methods present unique challenges.

By Election

In many volunteer FES organizations, administrators are elected. These organizations are often independent and self-regulated private corporations that are operated without formal scrutiny by the municipality or public (customers) they serve. Without public accountability or oversight other than the members named as its commissioners or board of directors, they may be more likely to make unintentional faulty decisions. To counteract this lack of accountability to the public, it is suggested that elected officials for the area served could appoint the chief officer from a list of qualified applicants, for example.

In addition to issues of accountability, these organizations may also have less stability and consistency than those of municipal FES organizations. This is because appointed officials typically have more latitude than elected officials in enforcing, interpreting, and changing the SOPs, training requirements, and equipment and apparatus needs and specifications.

In practice, volunteer chiefs may initiate change each time a new chief is elected. The resulting inconsistency is not caused by bad or incompetent people; it is the result of a system in which officers are elected by a democratic process.

Furthermore, because most volunteer chiefs are typically elected for a 1-year term, they must start working toward reelection as soon as they are elected, tempering their ability to be strong leaders. A similar situation exists in the U.S. House of Representatives, in which representatives are elected for 2-year terms. Almost as soon as representatives are elected and take office, they must start planning for their reelection. Thus, they spend a considerable amount of time and effort on reelection strategies, taking away from their key mission, which is to represent the people in their district and the interests of the United States. In most cases, these are honorable people who are placed in a system that has limitations encouraging policies and limits of the enforcement of rules and regulations that may be opposed by those supervised.

By Appointment

Just as there are limitations to volunteer organizations that elect their officers, there are problems when chief officers in municipal departments are appointed by a government's elected officials or administrators. While most are appointed from a list of qualified applicants based on formal education, experience, and a comprehensive interview process, the FES administrator might feel conflicting allegiances to those who appointed him or her, the labor group, and the public. It is not uncommon to find FES or EMS administrators

who feel alienated from their organizations. The chief officer may believe that the labor organization, the elected officials, and other appointed administrators all want to convince or force their particular ideas on the organization. Government officials and labor organizations have powerful self-interests, but the public may only have a weak influence because of its lack of knowledge about emergency services. Therefore, the chief should counteract this by being an advocate for the public interest.

Rules and Regulations

One of the main duties of a fire or EMS administrator is dealing with rules and regulations often created as SOPs. This includes analyzing, reviewing, creating, determining, and enforcing rules and regulations for the entire organization. In some cases, such as local, state, or federal regulations, rules may be mandated by a higher authority in government. These rules may also be initiated by a task force of officers and members empowered by the administrator to create SOPs for safety and efficiency during emergency operations. It is important to recognize, despite what some critics proclaim, including lawyers, that SOPs do not leave an organization legally liable if they are enforced strictly. If SOPs are promulgated and enforced rigorously and consistently, there should be no concern for liability issues. Vigorous enforcement actually helps to protect the organization from lawsuits.

Other than requesting additional funding from elected officials, enforcing rules and regulations is one of the most difficult duties of the chief officer. There are always some members and supervisors in fire departments and EMS organizations who do not like rules and regulations or who disagree with the rules and regulations. However, rules are absolutely essential for accountability and consistency, especially during emergency operations. Too often, support for rules and regulations comes only after a major tragedy. For example, after a devastating hurricane in Florida, the construction of new buildings required the use of specific techniques to reduce or eliminate the damage from these powerful storms **FIGURE 2-1**. Building and fire codes are rules and regulations that chief officers can use to accomplish their mission of fire safety, and it is often easier to find justification and public support for strict enforcement and changes after a major disaster.

Fire departments should have a set of rules and regulations that outline operational actions and safety expectations for its members and disciplinary action that may be taken for failure to follow these policies, including SOPs. Rules and regulations and subsequent orders from the chief should be in writing and distributed in such a method as to ensure all persons are made aware of them either through web sites or email distribution to members. Ongoing training sessions for new and existing SOPs should be scheduled throughout the year. There is no room for misunderstanding, especially of the safety regulations (NFPA, 2008).

As a general guideline, rules and regulations can fall into two major categories: management and emergency operations. For emergency operations, basic rules and regulations are absolutely necessary to provide consistent, safe, and efficient FES, especially in the first few minutes of emergency operations.

Additionally, employees who are unionized want to have a written contract that contains rules on personnel management. Such items, as when overtime is to be paid and many other conditions of employment, are typically included in a labor agreement. Most of these agreements are necessary to prevent inconsistent and unfair actions in personnel management. However, some agreements also contain items that can restrict effective administration. For example, a mid-west fire department's union contract severely limited the requirement for union members to train during inclement weather. This was specifically defined as below 40°F or above 85°F. When a new million and a half dollar ladder truck arrived in the middle of the summer, the firefighters were not allowed to train on this new truck because the temperatures would be above the high temperature mark. The very expensive ladder truck was stored for several weeks until the fall. One

FIGURE 2-1 Rules and regulations regarding building construction are created to prevent future tragedies.
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CASE STUDY

Administrator Dilemma

A supervisor receives a complaint from his superiors that a crew "abandoned" a patient. The supervisor is told that the crew was treating an abused child when the abuser returned and threatened them with bodily harm if they did not leave. The crew left, parked around the corner, and then called the police. The local news has a very negative spin on the story, and the public is outraged because the patient was an injured toddler. Therefore, upper administration is planning to suspend the crew over this incident to appease the media and the public.

Should the supervisor advocate for the crew based on the threat to their safety at the scene, or does he act on the need to mitigate the political firestorm before it has a negative impact on the organization's public reputation? Administrators have a responsibility to the organization to enforce the rules and the mission of the company, but they also need to be an advocate for the people doing the work that makes the organization viable and may adversely affect moral of the troops.

question that would challenge this requirement would be the expectation that firefighters typically respond and work at emergency incidents that occur at these adverse temperatures.

National Consensus Standards

National consensus standards, such as NFPA standards and Occupational Safety and Health Administration (OSHA) regulations, are relatively new to the fire service. Although the necessity of such standards is well accepted, FES organizations are still in the process of implementing changes to comply with many of these standards.

For example, an April 2001 article in the magazine *Fire Chief* asked four safety officers if their departments had completed a safety audit as described in the appendix to NFPA 1500 *Standard on Fire Department Occupational Safety and Health Program*. None of the safety officers interviewed reported that they were in full compliance with this safety standard, which was first adopted by NFPA in 1987, 14 years before the interviews. Instead, these safety officers estimated anywhere from 60% to 90% compliance (*Fire Chief*, 2001). Although compliance probably has improved since then, seldom does a department comply with

100% of the safety requirements. Because this type of change can be expensive and potentially disruptive to the organization and its members, slow improvement is very common.

Some NFPA standards are designed to reduce inconsistency in operations, staffing, training, and communications. These inconsistencies in the FES result in differences from agency to agency, town to town, and state to state. These differences add to the public's difficulty in judging the service provided and determining if the community is truly receiving professional-quality emergency service. At this time, a sign on the side of an engine that proclaims FIRE DEPARTMENT does not guarantee the same level of service for all similarly marked fire trucks throughout the country. Although the fire service has made a lot of advances, the pursuit of quality and consistency is still a work in progress. Administrators should work to implement these NFPA standards to ensure their organizations are delivering professional FES and be able to demonstrate that to their residents.

Some fire and emergency officials, along with elected and appointed municipal officials, outwardly resist complying with standards and regulations that they personally disagree with or that have fiscal impact. In some areas, local FES officials want the freedom to provide the level of public fire protection that is determined necessary by the local community. However, in many cases, the citizens of these communities have not done enough research to determine the needed local level of protection or quality of service (e.g., number of stations, training, companies, and staffing). Whatever resources and types of organizations exist at the local level are the result of a very complex and independent evolutionary process, not a systematic planning effort. That said, FES organizations are entering a new era of rules and regulations. In the EMS field, responders are now certified to national standards for emergency medical technicians and paramedics. In the fire services arena, national standards for training and safety are now available.

One example of a national standard for the fire service is NFPA 1021, *Standard for Fire Officer Professional Qualifications*. The chief may propose a new program to certify all officers to this standard. This type of program may require training, incentive pay, and overtime pay to cover classroom attendance (especially if education is a requirement for promotion). The selling point for this proposal is that, when completed, the city will have a more professional, competent fire department—a goal on which the municipal administration, the public, and elected officials can easily agree.

Standard Operating Procedures

Within an FES organization, the level of service can vary by shift or battalion. Freelancing or independent goal-setting can be deadly on the scene of a major fire; the public deserves an emergency services organization that can operate with a high degree of consistency and conformity. **Standard operating procedures (SOPs)** further this goal by achieving a high degree of conformity and consistency throughout the organization as well as ensure emergency scene safety and encourage situational awareness, which is sometimes a problem for a younger workforce that has little life experience and feels invulnerable. In particular, emergency response driving is a high-liability issue, and fatal accidents can occur. For that reason, many public agencies and private companies have developed SOPs regarding emergency response driving, such as those requiring units to stop at intersections with red traffic lights even in areas where emergency vehicles have exemptions from this traffic law. Infractions of this safety SOP are taken seriously for the safety of the crew, the patients, and the public.

Administrators must enforce the SOPs that guide the decisions made in emergency situations—when first responders have only a short period of time to consider all the alternatives—because it is critical for the safety and success of emergency operations. Although there should be some room for exceptions based on the judgment of the officer, an appropriate system to critique these emergency field decisions ensures that this latitude is not used without justification. This can be accomplished by using a standard written report submitted to a department safety committee. The committee would be directly authorized by the chief to analyze the incident along with the actions taken by the officer and/or crew. A written report would be completed and submitted to the chief for further action, including changes to the SOP or disciplinary actions. And finally, a formal report of the investigation should be circulated to all members.

For example, at a fire in a large vacant house, the first due engine stretched its hose line to the front door and began to enter. The department's SOPs required the first due engine to attack the fire from a position on Side 1 (the front), where the front door is found in most buildings. On entering, the firefighters noticed that the floor had burned through, leaving a large hole into the basement, which was initially blocked from view by heavy smoke and fire. The firefighters quickly retreated and radioed this information to the Incident Commander (IC). Based on the IC's judgment, a revised plan of attack was implemented, resulting in successful fire suppression.

Direct Supervision and Standardization

Many modern entrepreneurial businesses are organized around the principle of employee empowerment. Business administrators may argue that empowering employees is the best way for individuals to learn new skills and deal with changing environments. Employee empowerment can improve a business's service and competitiveness in the world where revenue generation is the goal. However, although the empowerment theory may work very well in a corporate or industrial organization, it does not lend itself to the FES organization at the company level.

FES organizations could not operate effectively if each company officer was empowered to determine what actions the company would take at an emergency incident. Although the overall incident strategy is the responsibility of the IC, the company officer is empowered at times to determine what tactics shall be used to complete a task assigned to them by the IC. For example, if the IC orders a company to ventilate the roof, it is usually incumbent upon the company officer to determine the most effective, efficient, and safest way to complete that task in a timely manner. Employees or companies acting independently (freelancing) at the scene of an emergency cannot be tolerated. Standardization and SOPs are needed to coordinate efforts, and direct supervision is required to ensure that each member works as part of the overall team **FIGURE 2-2**.

Direct supervision and standardization are especially critical for the FES organization during the first few minutes after arriving on the emergency scene. This is the time before the incident commander has arrived and has been able to evaluate and formulate a comprehensive strategy for the emergency. Consistent and reliable emergency operations at all times are

FIGURE 2-2 Safety committee meeting.
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very important, if not critical, to the successful and safe handling of emergency incidents, which in most cases requires strict adherence to the SOPs. However, because a few incidents will not fit neatly into SOPs, officers are empowered with latitude for independent judgment.

Bringing About Change

Do not underestimate the chief administrator's power to make change. In most cases, the administrator's power goes beyond simply giving orders that may or may not be followed. When chief administrators speak and initiate a new project or change, the attention of the organization and its members is immediately focused on the proposed change.

The chief officer also has the power to set the agenda for change in the organization. Generally, changes come about when the chief officer initiates the process, with the exception being changes that are forced from the outside by a court order, a new state or federal regulation, union pressure, or elected officials. In most cases, initiating change takes real courage and detailed preparation.

The chief officer's ability to get the administrative job done, identify problems, and, when necessary, make changes in the organization makes up a dynamic process. To comprehend these dynamics it is critical to understand the chief's power, the interdependence on professional capabilities and agency reputation, and the chief's ability to influence others. The following questions help determine if a chief officer is ready to manage and lead the march to initiate change:

- Is the officer knowledgeable about all aspects of emergency operations?
- Does the officer have the appropriate formal education?
- Does the officer lead by example?
- Can the officer gather all the facts needed to make an informed decision?
- Does the officer really know what is going on in their department and community?
- Can the officer schedule and set an agenda for change that is reasonable and evenly paced?
- Will the officer's proposed change improve the service to the public (customer)?
- Will the officer take risks for the sake of making real progress in improving service to the public?

The dynamic process of bringing about change involves several complex elements, including getting feedback, understanding the various sources of power

at play, and the process of negotiation as discussed in Chapter 4, *Leadership.*

Getting Feedback

The chief officer must attempt to maintain a professional, independent position, which at times can make the job a very lonely one. Although this loneliness may make it difficult for an administrator to get unbiased advice and feedback on controversial administrative decisions, it is important to continue to solicit this feedback from staff members and peers.

In fact, effective fire chiefs will find they do more listening and reading than talking. Before seeking feedback, administrators should gather information about new policies or equipment by reading and studying the issue. Take care that your informational sources are nonbiased and based on expert opinion and facts. Reference sources such as NFPA standards are a good place to start. Doing so may be a challenge in the FES, where most periodicals are not peer-reviewed for accuracy, veracity, and legitimacy.

Feedback from Staff Members

To be a part of the decision-making process, it is important that staff members demonstrate loyalty to the agency. Knowing that staff is loyal allows administrators to communicate honestly, trusting that any sensitive or potentially controversial information remains private.

Administrators should solicit opinions in an open format. Preliminary discussions with staff may be held in meetings behind closed doors to facilitate an open, honest dialogue. Never equate a privately expressed negative or opposing view as a sign of a person's lack of loyalty. In fact, this person may be giving the chief officer the advice needed to stay away from a bad decision. However, after the administrator has chosen a particular proposed policy, staff should be expected to support the change.

The chief officer should realize that there are situations in which the decision-maker does not know all the facts or circumstances. This lack of knowledge is sometimes referred to as **imperfect information**. Imperfect information may occur, for example, when the top staff members are reluctant to make an argument that opposes what the chief officer would like to do and thus do not inform him or her of an important obstacle, or when the officer is facing pressure from elected or appointed high-level officials to act before knowing all the facts. Behind a desk, it is easy for administrators to forget the field perspective **FIGURE 2-3**. Making decisions without an accurate understanding of the current situation is not effective leadership. Decisions need to be balanced among administrative

FIGURE 2-3 Even in personnel counseling, jumping to conclusion can be very unfair to the employee. Do your homework.
© Jones & Bartlett Learning. Photographed by Glen E. Ellman.

goals, public needs, fiscal constraints, political realities, and the needs and concerns of staff.

When the subject is one of major importance to the organization, it is best to empower a **task force** to study the issue and make recommendations. The task force should include members that represent diverse opinions and all levels of the organization, including experienced firefighters, field providers, and officers. A diversified task force opens communication and prevents information obstructions that can occur between different levels of management.

Chief officers should encourage open and honest dialogue and explain that it helps them to make fair policy decisions. Staff members should feel safe bringing their concerns to the chief officer; angry reactions from the administrator can discourage staff from raising negative information in the future.

A management style called **management by walking around** is also useful in fire and EMS administration and is discussed in Chapter 3, *Management*. In some cases, although the chief officer has the authority to order a change, members may make this change only in name, without actually changing their actions. Departments may report to their peers and community that they are progressive, but chief officers can use management by walking around—literally visiting with members of the staff (along with appropriate accountability techniques)—to find out what is really going on in their organizations.

Administrators should visit stations often and float ideas for informal discussion. It is important to remember that there may be some members who are unable to differentiate a brainstorming session from a formal announcement of a new policy, so administrators need to develop a keen listening ability and effective communication style. During actual implementation of a decision, an administrator should be their own intelligence officer, confirming that all the details to fully implement the decisions are complete.

Feedback from Peers

Often, other chief officers or professional acquaintances may be able to help in evaluating and discussing changes, especially if these discussions are better kept confidential in the preliminary discussions, research, and evaluations. While attending conferences and professional development courses, administrators can meet with professional peers who may be able to provide advice and insight into difficult decisions, issues, and contemporary problems.

Although some administrators may feel uncomfortable asking for help, it is important to work to overcome this reluctance. Administrators must be able to gather and analyze information to present a full picture to their peers. It is also important to be able to ask more than one person for advice to gain different perspectives on the situation. To illustrate this process, it is helpful to look at how a patient would deal with a life-threatening medical problem. The decision to undergo major medical surgery should not rest on the opinion of one surgeon. Just as in the field of medicine, consulting with two or more experts provides a second opinion and ensures that individual biases are weighed against one another. Furthermore, speaking to administrators in other parts of the state or country can provide a wider perspective and help prevent the conversation from being repeated locally.

Although feedback from peers is important, talking freely on a day-to-day basis about potentially controversial changes is discouraged. The casual nonstop conversation around the dining table in the firehouse kitchen is a great socializing time for firefighters and company officers, but the minute the officer puts on the fire bugles, everything they say takes on new meaning. As a firefighter, talk about controversial change may end with a good-natured argument; but, as the fire chief, this kind of talk may scare members to the point of damaging morale, resulting in strong opposition.

Real change always has opponents. It is not a good idea to give opponents a heads-up on the change, because this gives them more time to fight the change. One example of an effective way to combat this is the NFPA-sponsored annual meeting of Metro Fire Chiefs. It sends invitations to fire chiefs in some of the largest fire departments in the United States and several international departments. Only fire chiefs—not deputy assistants or other chief officers—can attend. This exclusion is intentional, designed to allow fire chiefs to

feel safe that all conversations and discussions at the conference are confidential. The NFPA realizes that the fire chief position is special and that those underneath and those above the chief's position can become adversaries when the chief attempts to initiate change.

For those chiefs who cannot attend or who do not command a metropolitan department, networking with fire chiefs in other departments can be very helpful for honest discussion of controversial subjects. A good place to meet other chiefs is at the National Fire Academy or national conferences such as Fire Department Instructors Conference, International Association of Fire Chiefs, and the National Fire Protection Association. An exclusive environment of peers gives the fire chief a safe venue to discuss potential or controversial changes.

EMS administrators also have avenues to gather feedback from their peers. For example, the National EMS Advisory Council (NEMSAC) is the nationally recognized council of EMS representatives and consumers that provides advice and recommendations to NHTSA in the Department of Transportation and to the members of the Federal Interagency Committee on EMS. They meet three times each year and discuss contemporary issues and also provide a venue for EMS administrators to share ideas and experiences. In addition, various EMS conferences and seminars are presented throughout the United States with dates and times at https://www.ems.gov/meetings.html.

However, administrators from private EMS companies must recognize that competition for 911 contracts makes peer discussion of decision-making more challenging. EMS administrators may know each other well but share little proprietary information. EMS administrators may learn from others by examining errors other companies have made; doing research; being honest in determining if a choice is cost effective; and making a decision based on the best interests of the company, the community, and the work force they serve.

Sources of Power

One of the challenges that FES chief officers encounter in bringing about change in the public sector is related to other sources of power that affect decision-making. This includes the power of tradition, political entities, employee unions, and the community, although administration comes with its own power.

Supervisors Power

The chief administrator's direct supervisor may be a city/county mayor, deputy mayor, public safety director, elected, appointed, political, or merit and in some cases a board of directors. The names and how they achieve their position are many. What is important is that the FES administrator reach out to the individual(s) to achieve a friendly and professional relationship.

This is easier said than accomplished. Most new chief administrators have been working in a highly specialized technical group of likeminded acquaintances. In addition, it is common to be working with other members who are almost like family. And, there are those administrators who are hired in from outside and this process becomes even more complicated and difficult but vital.

Personal face-to-face meetings work best and should be varied in their structure. A once a week lunch with the boss can be very effective. One of the goals should be to see each other as a human being, not the enemy. The conversations ought not be all business but include sports teams, family, vacations, and any other personal topic, but not to too personal. Eventually, you may become close friends. This can help in two respects: it makes it easier to approach your supervisor to implement controversial changes, including when they have to be funded and, for your long-term tenure, it is more difficult to fire a friend.

Between face-to-face meetings, electronic correspondence can be very effective. Updates of important actions or accomplishments should be sent to the boss and, if critical, followed-up with a phone call immediately. This is especially critical for any controversial issue that may end up with media attention. Make sure your staff is aware of your need to communicate even bad news timely.

Blogs and news web sites are also a good place for the FES administrator to keep up with the latest trends and news about FES, including other city/county and departments even if they do not directly affect FES. In addition, obviously, the Internet is a good place for research. Be cautious of the source of information because it is not uncommon for web sites to have a biased viewpoint. For example, at the U.S. Cattlemen's Association web site, information on health benefits of red meat may be biased and should be questioned. All in all, this news and research information is always good material for conversations with the boss.

It is imperative that these relationships be achieved in a respectful manner. Keep in mind that your boss has many pressures on their ability to distribute taxpayer resources. The political, merit, or appointed supervisor also has a boss and may not be able to decide in your favor. Do not get belligerent when the decision does not go your way. Assume that there was a logical reason and save your push for another day, month, or year. Also, your boss does not owe you a detailed explanation of the reasons behind the decision, so do not

press the issue. Be respectful of their judgment. Your reaction should communicate that you will try again in the future. Perseverance can be the key to long-term improvements in the FES department.

Power of Tradition

The power of existing traditions within fire and EMS services can provide a barrier to implementing change, often with tragic consequences. For example, a career fire department in Pittsburgh, Pennsylvania customarily staffed its engine companies with two or three members. At a fire, the officer was often physically operating the nozzle. This custom was caused by the lack of adequate staffing and the privilege of the position. After increasing the minimum staffing on each engine to four, on February 14, 1995, an engine company from this fire department responded to a house fire and found heavy smoke emanating from doors and windows. With a lieutenant on the nozzle and the two firefighters behind on the hose line, the officer was unable to supervise the operation and assess the situation on the floor where they were operating. When the hose line burned through, there was no longer any water to control the extensive fire on the floor below, and, tragically, the fire had also burned through their only known avenue of escape—the stairs leading up to the ground-level floor from the basement area where they were operating, and the three members on this hose line became the victims of the fire. This tragedy may have been prevented had the officer been supervising the operation, not physically operating the nozzle.

Too often, organizations are driven not by their missions, but by their rules, traditions, or budgets. Although rules are important, too many administrative rules and traditions can restrict an organization from being mission- or customer-focused. Therefore, administrators must understand the power of tradition in order to overcome it.

Political Power

To some, the term *politics* may bring up negative stereotypes of uncaring elected officials only taking care of special interest groups. In some communities it may seem that the big money contributors have more influence than ordinary citizens. Although some individual elected officials might abuse the power entrusted to them, this does not mean that the entire political system is not legitimate. Remember that politics is the foundation of the United States' representative form of government.

Although elected officials have many goals, one goal that is fairly common is to get reelected. In most cases, this means taking care of the voters' or the

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CHIEF OFFICER TIP

Do's and Don'ts for Working with Political Power

In your relations with elected officials, DON'T:

- show animosity toward their opinions or decisions
- support their election efforts (the other person may win and you will assuredly have an opponent)

DO:

- invite them to departmental events
- conduct basic orientation presentations in the fire house
- demonstrate fairness, honesty, responsiveness, openness, and accountability
- provide accurate and timely information on a regular basis
- follow-up as soon as possible on any communications or requests
- meet with them privately on major issues
- get to know them better personally

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campaign contributors' needs. For this reason, many elected officials are heavily influenced by the local voters. Because many voters are concerned about the amount of taxes they pay, elected officials almost always question any request for additional funding for the department. These politicians are acting as the voice of the individual taxpayer who may believe that taxes are already too high. This is especially common in jurisdictions with large numbers of taxpayers who are on fixed incomes, such as Social Security.

Furthermore, the view that fire and EMS services are monopolies has given elected officials justification to impose regulations, just as they do with local law enforcement agencies and public utility companies. A monopoly occurs when only one provider or company has complete control of the market and can charge prices that are above the market value—that is, what they would be worth in a competitive market. If a house catches fire, for example, the occupants do not go to the yellow pages to choose a fire department to call. FES are provided to anybody who calls, but only one primary provider is responsible for the service provided. In the United States, monopolies are illegal unless they are a government-regulated industry or service. In this way, the government can meet the public's expectations that it will maintain high-quality emergency services. Public FES can be viewed as

monopolies either provided by a government or allowed to operate without control by the local government (e.g., independent volunteer departments). Although municipal departments may have no trouble understanding the issue of government oversight, independent volunteer companies might strongly resist any oversight by elected representatives. This may be a mistake because administrators should respect and work with elected officials who represent residents in the community.

In addition to formal political authorities, such as elected or appointed officials, fire and EMS service administrators must be aware of informal sources of political power. This includes external groups of politically influential citizens such as:

- Employee or member associations (e.g., unions and volunteer fire companies)
- Media
- Special interest groups
- Professional organizations
- Businesses and industries
- Homeowners' groups
- Social clubs
- Religious organizations

Fire and EMS administrators should be in touch with other agency administrators or staff in these organizations and work to maintain positive relationships, because these groups can influence political decisions that affect the service's budget. In addition, the general public may affect approval of any proposed changes—yet another reason why public opinion is so important.

Some administrators may find it challenging to achieve the changes they desire in the face of the many opposing goals of these political groups. Before attempting a policy change, the fire and EMS administrator should consider the following:

- What political party is now in control?
- Are the elected officials short-term thinkers, long-term thinkers, or both?
- Are there any elected officials who are expected to lose or not run for reelection in the upcoming elections?
- Has a single-issue candidate recently been elected?
- Are elected officials elected at-large or from districts?
- Are there any signs of taxpayer disapproval?
- Is there any expectation of what is politically correct?

- Are there any elected officials who would have a reason to not support the FES organization?
- Are there any officials who would like to be a champion or strong supporter of the fire or EMS service?
- Do any of these elected representatives owe a special interest group that may oppose your changes?

An administrator must be willing to show courage, sacrifice, and determination to achieve their goals. The difference between caution and courage can be the difference between the status quo and successful progressive change. However, be cautious not to jump into a decision on change without fully analyzing all the potential opposition. It could defeat you or even in some cases cost you your job.

Always taking the safe path and insisting on having all the answers before making a decision prevents the chief officer from leading change in any organization. Seeking new frontiers for your vision and thriving on the unpredictability of the future helps achieve real change. Courage, planning functions, and vision reduce the unexpected changes that tend to push many organizations into crisis management mode. It is relatively easy to be a hero at the emergency incident; it takes a lot more determination to be a courageous leader who ventures out to make significant positive change in the organization.

Remember, there are always some people who are against change simply because it is change. As an administrator, one needs to be prepared to accept some inevitable criticism. Keep in mind that it may be unsubstantiated, self-interested, or fabricated. There are those that believe that the ends justify the means (i.e., lying, etc.). Be prepared for this type of opposition. The following abilities are helpful for administrators to overcome political opposition:

- Accepting the legitimacy of politics and elected officials
- Understanding the structure and process of politics and government
- Building political alliances, including personal friendships
- Obtaining the support of special interest groups
- Acquiring public support through effective marketing
- Practicing open and honest communications with employees, citizens, media, and appointed and elected officials
- Using conflict resolution, negotiation, and bargaining techniques

- Identifying the various stakeholders and any benefits they may receive or lose as a result of a change
- Developing trust between members in the organization, the public, the media, and government representatives

The Power of Unions

In FES organizations, unions work to protect the interests of their members and can have substantial influence over administration decisions. For example, the **International Association of Firefighters (IAFF)** is a labor union representing nearly 313,000 firefighters and paramedics who protect 85% of the nation's population. Since 1918, the IAFF has worked to unite firefighters and achieve better wages, improved safety, and greater service for the public **FIGURE 2-4**. Heading this organization is the general president, who is elected to a 4-year term by the membership. It is typical for the general president to serve for many years because there is no term limit. The lack of a term limit is advantageous because it emphasizes long-term goals over short-term success.

The IAFF actively lobbies in Washington through its political action committee FIREPAC, which has influenced OSHA regulations, NFPA Standards, and federal legislation. The IAFF contributes to congressional election campaigns for individuals who support its agenda and goals. In addition, the IAFF provides research and advisors to assist government officials in legislative decision-making. At the local municipal level, the IAFF's influence varies greatly throughout the United States, having less influence in the 27 "Right to Work" states **TABLE 2-1**. In a "Right to Work"

state, an employee cannot be required to join a union or pay union dues. This reduces the number of members and their influence on wages and benefits.

For many FES workers, the union becomes a social fraternal organization along with a platform for employee benefits and safety. However, in "Right to Work" states, the influence of the union varies depending on whether the administration formally bargains with the union. In any case, the real influence is primarily derived from the union president's ability to impact public policy. This is strongly affected by the same items that affect the chief administrator's power.

There are also national, state, and local efforts that aim to reduce the influence of public-sector unions. For example, in March 2011, Wisconsin's state government passed legislation restricting union bargaining rights for public workers (except for police and firefighters). These efforts are often driven by economic considerations and the desire to reduce expenses in the forms of worker wages and benefits, especially pensions, which the unions aim to protect. The union's job is to represent the workers in gaining better wages and benefits and safer working environments.

Although in difficult economic times unions have agreed to take a reduction in wages or benefits to save the jobs of union members, it is not the union's duty to save money for the community or government by declining wage or benefit offers. It is also important to understand that in other industries, employees who do not believe their wages, benefits, or working conditions are fair or safe may change jobs relatively easily. In FES, this is rare, because the system is designed to offer rewards and benefits based on seniority, discouraging employees from seeking other opportunities.

Many disagreements between the government and unions stem from each group not understanding the duties of the other. The job of chief officer, appointed official, and elected representative is to provide the best services to the public, given a specific tax revenue base. This is a very complex task. Offers of future retirement and health insurance benefits that once seemed realistic may now be problematic. For example, economic issues at the national level, such as Social Security and Medicare, more than likely will require changes to address their solvency.

Although there are many issues on which the government and unions may agree, there are also disagreements. These should be settled by principled negotiations, in which all parties should act in good faith toward their stated purpose. FES administrators should avoid being in a position where they feel forced to accede to union demands.

Unions like to use a process of binding arbitration to settle disagreements. In the process of binding

FIGURE 2-4 IAFF logo.
Courtesy of IAFF.

TABLE 2-1 Right to Work States

Alabama	Nevada
Arizona	North Carolina
Arkansas	North Dakota
Florida	Oklahoma
Georgia	South Carolina
Idaho	South Dakota
Indiana	Tennessee
Iowa	Texas
Kansas	Utah
Kentucky	Virginia
Louisiana	West Virginia
Mississippi	Wisconsin
Missouri	Wyoming
Nebraska	

Courtesy of L. Charles Smeby, Jr.

arbitration, both parties choose an impartial arbitrator or third party to represent their position and reach a compromise, which is binding on both parties. Binding arbitration should be considered for all disagreements, especially safety issues; however, elected and appointed officials often do not want wages and benefits to be considered for binding arbitration. This practice is receiving more scrutiny and resistance from voters, senior municipal officials, and political leaders, especially when financial demands are sought by unions or have been gained in prior agreements that are not supported by tax revenues. One common example is underfunded pension plans, which is of great concern for local unions and taxpayers. Municipal negotiators may have made promises that were not founded in factual assumptions of future tax revenues. Many times, these negotiated decisions are driven by politicians who know that they will not be around when the actual bill comes due. Local politicians encourage these agreements to gain votes and donations to their campaigns.

Union negotiators should demand professional actuarial analysis to guarantee sufficient funding for any monetarily based benefits. Check any financial

assumptions very carefully, such as growth of investments to support trust funds that provide for future payments. For administrators and union officials involved in negotiations, the book *Getting to Yes, Negotiating Agreement Without Giving In* (Fisher et al., 2011) provides additional guidance and recommendations.

The Power of the Community

Administrators should identify and become acquainted with the community's power elite at the earliest opportunity. The power elite are a small number of highly influential citizens rarely seen at public meetings. These are local people who have easy access to elected officials as a result of longstanding friendships, wealth, or influence at the local, state, or federal level of government. The powerful elite can either help with the adoption of a new policy or, with active opposition, doom the policy to failure. In most cases, it is unusual for the power elite to get directly involved in FES policy decisions. However, for major policy proposals, such as the construction of a new fire station or a request for funding that requires an increase in taxes, the chief officer should consider approaching these individuals privately and explaining the request personally. Although the help of the powerful elite may not be needed in all cases, they may have the potential to influence policy changes.

The following are examples of potential conflicts with the power elite:

- A new fire station on a vacant piece of property is proposed. The information about the neighboring properties contains the name of one of the power elite. However, the chief fails to make a personal contact with this person before announcing publicly that a site has been selected.
- A new physical fitness program is proposed that contains reasonable goals along with an implementation plan for those existing members who cannot comply immediately. However, the firefighter's union was not consulted. The president of the union is a long-time resident of the jurisdiction and knows many of the power elite by first name.
- The chief has just finished a high-rise fire seminar at a national conference. On returning to the city, a reporter asks for any revelations on fire safety discussed at the conference. The chief announces to the reporter that he is now convinced that all existing high-rise buildings should be equipped with automatic sprinklers, and that a proposed local ordinance will soon be submitted to require it. What the chief is not aware of at that time is that the power elite own many of the existing high-rise buildings.

Private ambulance companies are not in the same situation as fire departments in terms of community power elite having direct impact on internal policy decisions. However, EMS management is wise to seek out and court the power elite who may have influence with those who have political clout. When contracts are up for bid, community stakeholders can have a big influence. Incumbent companies may lose contracts even if they have a great response time record or few patient care complaints. The winner is usually the company that comes in with the lowest bid. Recently, companies with a history of 40 or 50 years of good service have been ousted by others that offer a lower bottom line or are politically connected. This includes the pressure by firefighter unions to take over ambulance transport, encouraged by the International FireFighters Union.

When faced with a conflict with the powerful elite, the chief officer might not always be fighting a losing battle. Approach the potential change by slowly building a consensus among those people who will have an influence over the final approval. In general, arguments that are backed up by professional judgment and solid research have the best chance of approval. If national consensus standards support the request, it will be easier to gain the support of the power elite and others who shy away from public debates.

Remember, the power elite and special interest groups (e.g., firefighters' unions and volunteer fire associations) can have a big influence over elected officials. Approach these groups and their officers at the earliest opportunity to gain their support. Although it may not always be necessary to gain their support to be victorious, in many cases their support can make the process smoother, resulting in a better chance of success.

Administrative Power

Administrators should know that power is never guaranteed. Being promoted to chief officer does not ensure that all members of a company(s) will follow all of the chief's orders. A FES administrator, when managing and leading change, would do well to study how the most powerful administrators in the world use position and power to make changes.

The FES or EMS administrator is familiar with the power of the direct order or command. The following criteria are necessary for a command to be followed without question:

- The reason for involvement is instantly recognizable.
- The orders are widely publicized.

- The words are clearly understood, coherent, and unambiguous.
- The supervisors and members who receive the order have control of everything needed to comply.
- There is no doubt about the authority to issue the command.

It is rare that orders on the emergency scene are not carried out verbatim, although this does occur. Because the FES are quasi-military organizations, it is well understood by all members that they must obey the orders of a higher-ranking officer. Officers are trained and educated to follow orders even if the justification is not provided or understood. Individual officers and their company assignment fit into an overall plan that may not be clear to a specific unit, but fits into an overall strategy to mitigate the emergency. Therefore, orders must be obeyed without question, unless it is clearly an unsafe directive.

Private ambulance companies are less likely to have the same level of quasi-military supervision, but field crews know there is a chain of command they must follow (e.g., medical and trauma care is approved by online or offline medical control). Offline medical control is accomplished by protocols, policies, and standing orders approved by the local medical director. Online medical control occurs when a provider calls a base station and talks to a Mobile Intensive Care nurse or emergency department physician to ask a question, get an opinion, or seek approval for a situation that might not be covered under written protocols. Seeking approval from a higher-level provider provides legal protection for the paramedic.

However, in nonemergency situations, the ability to effectively administer the FES organization ultimately depends on whether the chief officer can persuade or convince others of what ought to be done for their own good or for the betterment of their service to the public—essentially, their level of administrative power. In addition, follow-up deadlines and delegation all play a very important role in everyday managing and changing projects.

The ability to recognize a problem and take action to make sure it does not happen again is a great attribute for an administrator. The chief officer should establish an informal information-gathering system made up of friends and confidantes throughout the organization. In addition, it is critical for fire and EMS administrators to maintain their professional reputation. If the chief has the reputation of not following up on assignments, poor communication skills, or low empathy, then when a request for members to comply with one of the department's orders is issued—either

Employee Noncompliance

A good example of how employees may have their own agendas that keep them from complying with an order occurred during President John F. Kennedy's administration. In 1962, the President became aware that the Soviet Union was constructing nuclear missile facilities in Cuba. Because Cuba was so close to the mainland of the United States, these missiles could be launched and hit targets in the United States in an alarmingly short time.

As it became clear that his negotiations with the Soviets were not making any progress, President Kennedy ordered a blockade around Cuba. A blockade can be construed as an act of war, and the crisis brought this country to the brink of nuclear war with the Soviet Union.

During the negotiations that followed, an offer was received from the Soviet Union—if the United States would remove nuclear missiles from Turkey, the Soviet Union would remove its missiles from Cuba. At the time, Kennedy remembered that he had previously given a presidential order for the U.S. military to remove its missiles from Turkey. Kennedy had received expert advice that the missiles were not necessary for the defense of the United States and could safely be removed.

The military officials—who were trained to obey all orders from superiors—had deliberately failed to carry out an order by the most powerful person in the United States, the commander-in-chief. The military officers believed that these missiles were critical to the defense of the country. Fortunately, the military's disobedience provided Kennedy with a bargaining token to make a deal with the Soviet Union. The United States still had the nuclear missiles in Turkey that Kennedy then used in negotiations to trade for the removal of the Soviet missiles from Cuba.

However, after this experience, Kennedy set up a system to follow-up and collect information about what was really going on in the many levels of the government. The President obviously could not manage such a large organization by walking around, but he established direct contacts with friends and trusted confidantes throughout the government.

Accurate feedback can be hampered either by subordinates following their own agendas or by high-ranking government officials not wanting to give the boss any bad news. This type of behavior by subordinates can be prevalent in departments where the administrator has a lot of influence over who is promoted. Many subordinates see their chances of being promoted as being based on their ability to do a great job and keep the boss happy. Colloquially, this is called surrounding yourself with "yes" people or "groupthink" of the close staff. Kennedy did not want to be blindsided again and therefore made extensive changes to provide impartial avenues by which information could reach him. (Neustadt, 1990)

verbally or in writing—many will not comply. Noncompliance is much more likely if members do not agree or are anxious about the consequences of the change or request.

The Process of Negotiation

In most cases, when a new vision or policy is proposed, the chief officer must negotiate or convince others that the change is good. Most administrators would think that they have the advantage in bargaining because they are the recognized leader. However, bargaining power only starts with the formal position; it also includes professional reputation and knowledge and skill in debating.

There may be opponents to the new vision because some members may lose privileges or simply because they resist any change. Member opposition does not mean that it is impossible to make policy changes, but the chief officer must be prepared, informed, and patient. Officers must have a plan to compensate those who stand to lose (if possible) and be able to prove that the change is based on solid research, logic, and professional judgment.

Chief officers who have a trustworthy and justifiable proposal may be able to negotiate an agreement with the members to implement the policy. For example, faced with irrefutable justification for the betterment of the public and the individual, many labor organizations cooperate with a negotiated agreement. If administrators have the facts and can prove them, they have the bargaining and influence power.

Administrators in government agencies should stay in contact with a number of individuals outside of their formal organization to help support major changes in policies, such as staff members of legislative committees, researchers from nearby think tanks, and representatives of lobbying firms and public interest advocacy groups. In addition, other government agency administrators and their staff need to be contacted on a regular basis to facilitate information flow and, when needed, solicit support for policy changes.

Informal organizations can be used to help facilitate the negotiations and data gathering that must go along with the decision-making and consensus building revolving around a proposed public policy objective. Informal organizations can help overcome barriers to change and facilitate communication between different groups; however, if not approached correctly, they can also sometimes initiate and facilitate resistance to change. An effective administrator must take full advantage of the informal organization to gather facts and acquire support for any policy changes.

Wrap-Up

CHAPTER SUMMARY

- Understanding that administration is made of two components, management and leadership, will help the reader understand how to be an effective and efficient administrator.
- Recognizing that professional standards are the key to successful administration and service to the public.
- Understanding that SOPs are key administrative tools to guide the members in consistent, professional, and safe service to the public.
- Comprehending the many aspects that improve the administrator's ability to recommend and successfully adopt progressive change despite the many challenges.
- Awareness in how to gain influence over the political process using feedback and support from members, including other agencies and outside influential people and organizations.

KEY TERMS

Administration The practice of supervising and leading an organization to achieve its goals.

Battalion chief A chief officer who supervises a number of fire companies or a subdivision of the fire department.

Chief officer The principal administrator of a fire department.

Emergency medical technician supervisors A supervisor who has the responsibly of several EMS units or a section of the organization.

International Association of Firefighters (IAFF) A labor union representing nearly 313,000 firefighters and paramedics.

Imperfect information The lack of knowledge required to make an informed decision.

Leadership Inspiring trained personnel to safely and professionally complete their mission using the resources provided by the FES organization.

Management Ensures that the organization is prepared and able to accomplish its goals by establishing that sufficient personnel and equipment are available for the organization to perform its duties.

Management by walking around Refers to administrators spending some part of each day listening to problems and ideas of their staff, while physically wandering around an organization.

Standard operating procedures (SOPs) Rules and regulations for safety and efficiency during emergency operations.

Task force A group of employees assembled to discuss an important decision before implementation and to make recommendations.

REVIEW QUESTIONS

1. Compare and contrast management and leadership. Do you feel your personal strengths lend themselves toward one or the other? Explain.

2. Do you think it's more effective when administrators are selected by appointment or elected into their positions? Defend your answer.

3. Describe how rules and regulations (SOPs) help reduce freelancing on the emergency scene. Research a specific example from a national consensus standard that is applicable to your experience.

4. Review the checklist on page 25 to help determine if a chief officer is ready to manage and lead change. Which of these questions do you feel is the most difficult for new administrators to check off? Why?

5. Provide an example of a past incident in which you solicited feedback in order to solve a problem. Whom did you ask for the advice? What strategies did you use to obtain effective feedback?

CHAPTER ACTIVITY #1: AN EXAMPLE OF POLICY ANALYSIS

A voluntary physical fitness program increases the average physical fitness of firefighters. It is well recognized that firefighting requires a high level of strength and endurance. Therefore, the assumption is that the public would be better served by firefighters who can perform at more advanced physical levels.

Firefighting is a team activity, so the weakest link limits the entire company or team. When a two-person team enters a structural fire and one individual is in good physical fitness and the other is not, the total team effort is limited by the less fit person. For example, a person in good aerobic condition can have a useful work time with a self-contained breathing apparatus of around 20–30 minutes, whereas the unfit person may not be able to stay more than 10 minutes before the low air alarm sounds. Therefore, the team of firefighters is limited to 10 minutes because when one firefighter leaves, the other must also leave for safety reasons.

Conclusion: A mandatory physical fitness program is needed.

Discussion Questions

1. Make a list of management and leadership goals that have to be accomplished to implement the conclusion from the above case study.

2. Do you have a management or leadership preference? How would this preference affect your actions necessary to complete the change process? Give several examples.

3. If you are stronger in either management or leadership, describe how you would select and incorporate people with the other preference into your implementation process.

CHAPTER ACTIVITY #2: CHAIN OF COMMAND

There is a shooting incident in your district and two victims need emergency medical treatment. After police secure the scene, your Basic Life Support (BLS) first responder engine arrives and Incident Command System (ICS) is initiated. As your company begins assessment, an EMT/paramedic unit from the private transport company arrives. With the help of firefighters, the paramedic assesses the patient with a bullet wound to the abdomen. In addition, EMTs assess the patient with an apparent extremity injury. The officer of the BLS engine determines that the first patient with the gunshot wound to the abdomen meets trauma center criteria.

The company officer calls for a medical helicopter per county policy because ground transport to the trauma center would exceed 30 minutes. He is given a 15 minute ETA. In 10 minutes, he calls the fire dispatch center to confirm the ETA of the helicopter and is advised that the request was canceled by the ambulance provider through their dispatch center.

Discussion Questions

1. As the FES administrator, how would you handle the paramedic canceling the helicopter without consulting IC, thereby failing to use the chain of command?

2. Who was ultimately responsible for the delay in patient care?

3. What can be done to assure this type of problem doesn't occur in the future?

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Management

LEARNING OBJECTIVES

After studying this chapter, the student will be able to:

- Understand the role of management in fire services and emergency medical services (EMS) (pp 38–39).
- Know the four key managerial tasks of planning, organizing, directing, and controlling (pp 39–49).
- Discuss the value of experience and intuition in decision-making (pp 39–40).
- Describe techniques managers can use to increase staff compliance with rules and regulations (pp 45–46).
- Explain techniques for motivating staff members (p 45).
- Apply the three-step control process to accomplish organizational goals by measuring performance, comparing against a standard, and taking corrective action (pp 47–49).
- Discuss the management strategies of technology-based management, total quality management, leading by example, broad-based empowerment, and managing by walking around (MBWA) (pp 49–52).
- Comprehend managerial performance standards and methods of performance assessment (pp 52–53).

Case Study

The Devil's Advocate at Work

A fire prevention program manager would like to increase the number of home fire inspections performed by station personnel. The station personnel have reported that they do not have any time available as a result of emergency calls, in-service training, physical fitness, and station and apparatus maintenance. Firefighters work a 24-hour shift during which the required nonemergency duties are performed during daylight hours. The time after dinner until the morning, by tradition, is reserved for personal time or call response.

However, the prevention manager would like to suggest that the time after dinner (and during weekends) be used to do these inspections. The manager believes that this would be a good time because many residents who work would be at home during the evening hours and weekends. Because these inspections are voluntary, the requesting residents would be advised of the time of their appointment with the understanding that an emergency call would necessitate rescheduling.

Discussion Questions

1. How popular would this idea be for most members in your departments?

2. Would proposing this idea be controversial or resisted by the members and their labor unions?

3. What type of information or justification would hopefully be able to lead the group to a progressive change?

What Is Management?

Management is the glue that holds an organization together on a day-to-day basis. Management is what enables an organization to achieve its goals, efficiently and effectively, with the necessary staff, equipment, and resources. As explained in the chapter *Introduction to Administration*, management and leadership skills are two very different components of fire and EMS administration. Leaders provide the vision and are change agents for an organization, whereas managers supervise and facilitate the work of others within the organization.

Although many people may gravitate toward management for its status, being in a supervisory position comes with a great deal of responsibility.

There are four main responsibilities of management:

1. **Planning** includes creating and defining goals, and making important decisions and establishing strategic plans to achieve these goals. Without proper planning and implementation, the change required to meet new goals can be painful for the organization, its members, and its customers. Planning is discussed in greater detail in the chapter *Public Policy Analysis*.

2. **Organizing** is the process of determining what tasks need to be done and who is to perform these tasks. The manager determines the organizational structure (who reports to whom) and which parts of the organization respond to day-to-day problems. A good organizational chart indicates the major groups and who they report to for direction.

3. **Directing** the organization involves many tasks such as motivating and supervising staff, communicating with members, spotting noncompliance, administering appropriate disciplinary action, and resolving conflicts. These actions are what most people think of when they picture a manager.

4. **Controlling** refers to monitoring performance, measuring outcomes and progress toward goals, and making any adjustments necessary to keep the agency moving toward those goals. As part of this process, managers also provide feedback for future planning.

There is an old saying in management that to manage anything you must be able to measure it. Generally, effective management can be achieved if you set a clear goal and find something to measure that will indicate progress toward that goal. This may seem basic, but it is amazing how often it is not done and how hard it is to get right. A very simple example happens every day in many fire departments: At the beginning

of each shift, the total number of firefighters present is reported to a manager. If a company is below minimum staffing, firefighters are detailed in or called back on overtime to meet the department's goal. This is the basis for all management control functions: valid measures.

These four responsibilities are discussed in greater detail in subsequent sections.

Planning

One of the key responsibilities that is critical to excellent service of a manager is to make day-to-day decisions to respond to situations that are not expected or planned for in the strategic plan. This section explores key aspects of the planning process—routine decision-making, including time sensitive decisions during emergency situations.

Decision-Making

In many cases of problems or identified issues needing change(s), the Fire and Emergency Services (FES) culture may default toward the use of intuitive decision-making by the chief officer. However, this approach generally is accompanied by a bias toward the tradition of the individual department. It also has been observed that the largest "big" city is imitated by the surrounding departments, which is another bias. In addition, a TV show such as *Chicago Fire* probably has an influence on many departments. Even the color scheme of the fire trucks is being copied by many departments (i.e., black top). This severely limits the potential to consider more innovative ideas.

There are many techniques or analytical tools that can be used to identify and organize research toward finding solution(s). Managers should be careful at selecting these analytical tools because many have been derived for complex issues in "for profit" businesses. Because these unknown issues are relatively rare, the use of an outside management consultant may be helpful.

1. As noted throughout this text, many operational issues can be answered by reviewing professional standards such as those promulgated by the National Fire Protection Association (NFPA). When needed for issues not resolved or addressed, a classical and very helpful process, used to organize decision-making, is listed below:
   a. Recognizing a critical need
   b. Defining the problem
   c. Collecting data and observations
   d. Analyzing the data
   e. Developing a hypothesis
   f. Testing the hypothesis multiple times to assure consistency and validity.

Probably the most key item is "defining the problem." It is very common to identity a symptom or not take into consideration that the problem may be the result of numerous causes. Also, in the FES it is not unusual to attempt to look for a quick and easy solution. This is the result of an action-oriented approach to everyday operations that requires immediate action to resolve an emergency incident.

This process is not intuitive and can be very complex. There are numerous educational sources to help understand this process as well as municipal government professionals or outside consultants.

Intuition in Decision-Making

Standard operating procedures (SOPs) cannot cover every situation at the scene of an emergency, so managers must be able to make quick, critical decisions. One of the qualities of an effective manager is the ability to make the right decision in the face of unfamiliar circumstances. These successful officers are often described as having good instincts, intuitively sensing when something is dangerous or wrong, or listening to a "gut feeling." Although **intuition** should not replace consideration of the facts, accepted knowledge, or prior experience, it can (along with common sense) contribute to decision-making.

Many experts believe that a person's subconscious mind holds all of the acquired knowledge, ethical values, past experiences, training, and skills that are used for complex problem solving. This has a large influence over what we call intuition. That is why it is always better when making an important decision to "sleep on it" if possible and allow the subconscious mind to process the information.

In part, intuition comes from experiences and acquired knowledge. In his bestselling book *Outliers: The Story of Success* (2008), author Malcolm Gladwell claims that the key to success in any field is, to a large extent, a matter of training, education, and about 10,000 hours of professional experience. Although a lot of experience is needed, it is not necessary to get all the experience oneself; the experience can be acquired from others through the review of case studies and writings of those with years of experience. Learning from others allows managers to gain knowledge of difficult situations without having to put themselves or their staff in danger, which is

Fire Prevention

An example of group decision-making can be found in in the following case. In the 1980s, the Prince Georges County, Maryland, Fire Department was experiencing numerous large-scale fires in garden-style apartment buildings and identified this situation as a critical problem because they were very difficult to extinguish, often resulting in firefighter injuries, and would culminate in whole rows of buildings burning down. These multi-dwelling structures were either three or four stories with four apartments per floor. They were accessed by a single central stair and the buildings were of combustible construction. Many of these buildings had two uninhabitable basement areas that were used as shared laundry and storage rooms for the tenants. These areas were below grade and had no windows; therefore, the only method of attacking a fire in these areas was to extend hose lines down a half story of stairs and into the door leading to these rooms—a tough and unsafe tactic. The storage areas were commonly used to store combustible items, such as renters' personal items, furniture, and even car tires. Most of these fires were deliberately set and would, without rapid extinguishment, spread to floors above via voids in the walls. The end result would find fire in the attic and lead to complete destruction of the entire building and in many cases adjoining buildings.

The fire department had gathered computerized fire data for many years, and one of the items captured was whether there was a delayed or immediate notification of the fire. After analyzing the data, a strong correlation appeared between the ultimate property loss and the detection stage. As one might suspect, delayed detection (caused by the lack of heat or smoke detectors) resulted in higher property losses.

By analyzing this data, the department was able to identify a problem along with a solution and implement special fire code requirements to address the problem. The owners were either required to install a limited water supply sprinkler system using the domestic water supply or vacate and lock the storage rooms and install a smoke detector tied to the buildings' fire alarm. This change resulted in the significant reduction in these large-loss fires. In this case, the data identified a measurable problem that was analyzed and used to ultimately improve fire safety for both the occupants and firefighters extinguishing these large fires. Mission accomplished.

especially advantageous in emergency operations. To gain knowledge, managers can learn from textbooks, reports of actions at emergency incidents, visits to other FES agencies, investigations into emergency responder deaths and injuries, articles about incidents, interviews with other emergency responders, professional websites, and professional qualifications and safety standards.

Managers may wish to make decisions on their own as individuals, or they may make decisions based on group input. **Group decision-making** occurs when individuals, typically those that are affected by the decision, collectively study and make a choice from the potential realistic options. In most cases, the chief manager provides a definition of the problem, some background information, and any limitations on the group's decisions before the decision is handed over to the assigned group.

When to Use Group Decision-Making

When the final decision directly impacts organizational activities, members' benefits, or performance benchmarks, group decision-making may make acceptance easier, particularly when sacrifice is required. Groups may find unique solutions to problems; for example, unions have voted to accept pay decreases instead of layoffs. With group decision-making, managers are less likely to feel blindsided by a lack of information about possible (or preferred) solutions. One of the major reasons noted for bad decisions made by management is lack of factual information. Group decision-making ensures that many diverse opinions are discussed. This process also results in the collection, verification, and analysis of a lot of background information regarding the problem, dramatically reducing the chance of a poor decision being made.

The collection of verified background information from reliable sources is especially important in today's world, when major media communications organizations have been found to misrepresent facts and in some cases promote outright propaganda. For example, social media platforms are struggling with blocking "hate speech" or falsehoods that can inadvertently or deliberately exclude real truths as a result of their new policies. In order to make effective decisions, managers must be aware of information from biased organizations or advocacy groups. Rigorously check any facts or data you use for veracity. There is no easy method to this process; it just requires decision researchers to be very conscientious and diligent.

Emergency Incident Research

When conducting emergency incident research, consider using the following Internet resources:

- *Firehouse Magazine,* https://www.firehouse.com/
- *Fire Engineering Magazine,* https://www.fireengineering.com/
- *The Fire Chief*, https://www.firechief.com/
- *JEMS: Journal of Emergency Medical Services*, https://www.jems.com/
- *EMS World Magazine,* https://www.emsworld.com
- Fire Fighter Close Calls, http://www.firefighterclosecalls.com/
- U.S. National Institute of Science and Technology, Fire Research Division
- *NFPA, https*://www.nfpa.org/News-and-Research
- U.S. Department of Homeland Security, https://www.ready.gov/preparedness-research
- Disaster Information Management Research Center https://disasterinfo.nlm.nih.gov/
- U.S. Fire Administration, https://www.usfa.fema.gov/data/Disaster Information Management Research Center
- *CSB Chemical Safety and Hazard Investigation Board, https://www.csb.gov/*

How to Select Group Members

Effective group decision-making should include a group of individuals from all levels of the organization. Outside experts such as elected officials or other agency representatives can also contribute to the process. Group members need to be selected carefully based on their openness to discussion, absence of bias, expertise, and ability to come up with rational solutions. Managers must be cautious not to be predisposed toward selecting group members who are in favor of the administration's preferred solution. The advantage of increased acceptance is lost if members believe the decision-making process was manipulated. Group members should have a minimum amount of experience, because there are some idiosyncrasies of the profession that simply take time to learn; however, they should also not be near retirement. Members nearing retirement may not have a stake or interest in solving the problem. One common policy is to allow groups, such as the union, to appoint one or more members to the decision-making group. These selections should be accepted by the administration even if these members might be biased and would not otherwise have been selected.

Optimal Group Size

Although there is no unanimously accepted number, groups of 5–15 members seem to be the most effective size for timely group decision-making. Whatever number is chosen, it should be an odd number to enable the group to reach a final decision using a simple majority of members. Some organizations that use group decision-making to determine consensus standards (e.g., the NFPA) may have committees with up to 30 members. Larger groups may have greater difficulty arranging in-person meetings, and in most cases all members will not be able to attend. Although electronic audio-video conferencing can help, ideally meetings should be in person. With the COVID-19 virus, temporary video conferencing meetings may be the only option.

Techniques to Aid Group Discussions

Several different techniques may be useful in group decision-making.

Understanding Limitations

Managers are responsible for communicating any limitations of resources or other relevant areas (e.g., specific laws or regulations) to the group members. This may include mandates from elected officials, legal restraints, and state or federal regulations. In addition, the manager may wish to outline possible solutions and describe any that will not be accepted by the administration.

Gathering Information

Managers may wish to encourage group members to consider ideas for solutions that have demonstrated success in other departments. Group members may wish to consult research articles or visit departments that have had similar problems. This allows group members to gain insight into what has been tried elsewhere and what has succeeded or failed. Managers should encourage members to have an open mind; just because a solution failed somewhere else does not mean it will not be successful in their department.

Newer technologies and communication sources are almost infinite. Research using https://duckduckgo.com/ and https://www.google.com/ will serve up a large list of Internet resources. First, it is a good idea to use more than one search engine because some edit online content. Be cautious and review as many as you can to find truthful nonbiased information.

For larger very dispersed departments, video conferencing combined with face-to-face meetings can be very effective and travel time advantageous. This takes a little planning that should include background research information. Also, any limitations on any suggestions that would not be acceptable need to be revealed to the participants.

And finally, the old fashioned phone can be very helpful. Using the Internet, find phone numbers of members in other departments that may have experienced the same issue. For example, in a suburban highly populated county, a new indoor sports arena was being planned in the early 1970s. Because this department had no experience with the fire protection features or fire prevention rules for this type of venue, they sent fire prevention officers to visit the fire departments in major cities that had these buildings. They were welcomed by fire officials in these jurisdictions and were provided tours and conversations on effective fire prevention procedures for the safety of inhabitants. This turned out to be a critical help.

FIGURE 3-1 Brainstorming allows any and all solutions to be recommended without any initial judgments.
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Reviewing National Consensus Standards

Fire services and EMS may be required to meet standards defined by national organizations, state governments, or local contracts to ensure quality and accountability. The guidelines provided by federal agencies, state authorities, professional organizations (e.g., NFPA, National Highway Traffic Safety Administration [NHTSA], Occupational Health and Safety Administration [OSHA]), and union agreements should be considered when determining company policies. For example, it can be argued that if a department complies with NFPA 1500, *Standard for Fire Department Occupational Safety and Health Program*, it will be empowered to deliver superior emergency service to the customer.

Brainstorming

In the process of brainstorming, members may suggest any solutions without initial judgments; this is essentially a technique to generate ideas **FIGURE 3-1**. Anonymous input should be arranged, if possible, to encourage those members who may not want to publicly advocate their ideas for fear of criticism. However, this may not be necessary because only ideas—not criticism—should be allowed during brainstorming sessions. After all of the suggestions have been documented, the group should be given time to consider the available options before discussing them, ideally until the next meeting.

Discussion

At the next meeting, members may discuss the options and offer criticisms of the proposals. Members or staff should be selected to research the ideas, including all previous successful or unsuccessful experiences. Pros and cons should have solid data or reasoning behind them and should not be dismissed just because they have not been done before. Going through all the available options may take several meetings, but it is time well spent to ensure that group members have examined all possible solutions.

Devil's Advocate

Only through questioning the status quo (e.g., the culture or tradition) does real change occur in organizations. For this reason, one or more group members may be assigned or voluntarily take on the role of "devil's advocate" during the decision-making process. The devil's advocate is a person who pretends, in an argument or discussion, to be against an idea or plan that a lot of people support, and is an effective way to make other group members justify their support of a preferred idea. This role is not for everyone; the desire to be liked by others and not take an unpopular stance is one of the most challenging issues a person may face in his or her private and professional life. To express one's concerns without angering others, it is best to keep the focus on how the customer, member, or department will benefit from the new policy or decision and how alternate solutions may be harmful for the