

Emergency Planning

A guide to developing comprehensive emergency plans.



Lakeland Fire Department

This guide has been provided by the
Lakeland Fire Department
Fire Safety Management Division
701 E. Main Street
Lakeland, Florida 33801-5038
(863) 834-8201

What would you do if catastrophe struck your business?

There are a number of “common” disasters such as hurricanes, personal injuries, flooding, chemical spills, and fires that can potentially disrupt your business. No industrial, commercial, mercantile, or public sector organization is immune from disaster. Emergencies can occur at any time from many causes, but the potential loss is the same - injury and damage to people, the environment, and property.

Disasters do not just appear one day. Rather, they exist throughout time and have a lifecycle of occurrence which must be matched by a series of management phases that include strategies to mitigate hazards, prepare for and respond to emergencies, and recover from their effects.

While you might not be able to prevent the disaster, you can take steps in advance to minimize your losses. To protect employees from fire and other emergencies and to prevent property loss, a comprehensive preparedness plan should be developed and reviewed with each employee. Although all plans should include strategies for all four management phases, the type of facility and its associated hazards are factors that determine the complexity of the plan. No one emergency plan will do all things for all organizations. Each company must decide on a plan that fits its needs and budget.

A four-step planning process can be utilized to develop an emergency plan.

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|--------|----------------------------------|
| Step 1 | Establish a Planning Team |
| Step 2 | Analyze Capabilities and Hazards |
| Step 3 | Develop the Plan |
| Step 4 | Implement the Plan |

Step 1 - Establish a Planning Team

There must be an individual or group in charge of developing the emergency plan.

- ◆ **Form the Team** *The size of the planning team will depend on the facility's operations, requirements, and resources. Usually involving a group of people is best because it gets more people vested in the process and provides for a broad perspective. You should obtain input from all functional areas. Participants should be appointed in writing by upper management. Job descriptions could also reflect this assignment.*

Comprehensive Emergency Management includes mitigation, preparedness, response, and recovery.

Mitigation refers to activities which actually eliminate or reduce the chance of occurrence or the effects of a disaster.

Preparedness is planning how to respond in case an emergency or disaster occurs.

Response activities occur during and immediately following a disaster.

Recovery is the final phase of the cycle, involving activities to return all systems, structures, and employees to normal operations.

- ◆ **Establish Authority** *The group should be led by the chief executive or the manager. Demonstrate management's commitment and promote an atmosphere of cooperation by "authorizing" the planning group to take the steps necessary to develop a plan.*
- ◆ **Establish a Schedule and Budget** *Establish a work schedule and planning deadlines. Develop an initial budget for such things as research, printing, training, and other expenses that may be necessary during the development process.*

Ultimately, the responsibility of the emergency plan lies with the highest level of management who best know a facility's resources, operations, and capabilities.

Step 2 - Analyze Capabilities and Hazards

This step entails gathering information about current capabilities and possible hazards and emergencies, and then conducting a vulnerability analysis to determine the facility's capabilities for handling emergencies.

- ◆ **Review Internal Plans and Policies** *Review any existing policies, procedures, or plans that the organization has in place.*
- ◆ **Meet with Outside Groups** *Meet with government agencies, community organizations, and utilities providers to discuss available resources and expectations during emergency situations.*
- ◆ **Identify Codes and Regulations** *Identify applicable federal, state, and local regulations.*
- ◆ **Identify Critical Products, Services and Operations** *Review information concerning critical products, services, and operations to assess the impact of potential emergencies and to determine the need for backup systems.*
- ◆ **Identify Internal Resources and Capabilities** *Identify resources and capabilities of your organization that could be needed in an emergency. Consider personnel, equipment, facilities, organizational capabilities, and backup systems.*
- ◆ **Identify External Resources** *There are many external resources that could be needed in an emergency, such as the fire department, emergency management, law enforcement, hazardous materials response organizations, utility companies, contractors, and suppliers of emergency equipment. In some cases formal agreements may be necessary to define the facility's relationship with the external resources.*
- ◆ **Review Insurance Coverage** *Meet with insurance carriers to review all policies.*

Consider regulations such as:

- ◆ Occupational Safety and Health
- ◆ Environmental regulations
- ◆ Fire Codes
- ◆ Transportation regulations
- ◆ Zoning regulations
- ◆ Corporate policies

When assessing resources, remember that community emergency workers will focus their response where the need is greatest. Or, they may be victims themselves and be unable to respond immediately. That means response to your facility may be delayed.

- ◆ **Conduct a Risk Analysis** *Consider the natural hazards, technological hazards, and national security emergencies that could occur within your facility and in your community. Determine which hazards are most likely to occur and assess the extent of possible damage to your operations, facility, and the community.*

There are many factors to be considered when determining the dangers to your business from natural hazards, technological hazards, or national security emergencies. These factors include:

- ◆ The communities past history of emergencies caused by the hazard
- ◆ Geographical considerations
- ◆ Community characteristics
- ◆ Distance from transportation routes, large urban areas, large industrial areas, or military bases

Natural hazards are those caused by natural events that pose threats to lives, property, and other assets. Natural hazards often can be predicted and you can mitigate against many of the damaging effects. Natural hazards tend to occur repeatedly in the same geographical regions because they are related to weather patterns or because they are related to the physical characteristics of an area. The natural hazards that should be considered in this geographic region are listed in the Table 1.

Table 1: Natural Hazards Likely to Affect Florida

Hazard	Description	Related Hazards
Severe Thunderstorm	Severe thunderstorms are weather systems accompanied by strong winds, lightning, heavy rain or hail, and possibly tornados. They may occur singly, in groups, or in a long line that can extend hundreds of miles.	Heavy rains may cause floods and flash floods. Violent thunderstorms can also cause tornados.
Flood and Flash Flood	A flood occurs when a river or stream overflows its bed onto normally dry land. Floods can be slow to develop, or in the case of flash floods, they can occur suddenly with devastating power.	Floods can cause landslides and mudflows as well as power shortages or outages.

Table 1 Continued

<p>Hurricanes</p>	<p>Hurricanes are severe tropical storms that spiral around a calm center known as the eye. Wind speeds range from 74 miles per hour to a high of 220 miles per hour. As hurricanes approach land, they create a storm surge along the coastline that raises water several feet above high tide levels. Hurricanes also dump heavy rains and cause flooding as they travel inland.</p>	<p>Hurricanes may be accompanied by other severe storm hazards such as lightning, tornados, and flooding.</p>
<p>Tornado</p>	<p>Tornados are extremely violent localized windstorms. A tornado is characterized by a funnel cloud that reaches the ground with velocities inside the funnel as high as 200 miles per hour. They create an incredibly loud roar and almost always travel from the southwest to the northeast.</p>	<p>Tornados are usually part of a severe thunderstorm and may be accompanied by lightning</p>
<p>Drought and Extreme Heat</p>	<p>A drought is an extended period of unusually dry weather. Droughts become severe if several months pass without significant precipitation. Extreme heat is defined as temperatures that are 10 or more degrees above the average high temperature, and that last for several weeks during the hottest time of the year.</p>	<p>Drought and extreme heat can cause shortages of water and food crops. Parched lands are more susceptible to wildfires during periods of drought. Drought can actually result in later flooding. The vegetation dies without water, and as a result, even an average rain can cause flooding.</p>
<p>Wildfire</p>	<p>A wildfire is any instance of uncontrolled burning in grasslands, brush, or woodlands. Wildfires can be caused by lightning, human carelessness, or arson.</p>	<p>Soil erosion, landslides, and flash floods are often secondary events of wildfires.</p>

The information contained in Table 1 and Table 2 was taken from Emergency Preparedness U.S.A., a Federal Emergency Management Agency publication published in 1998.

Technological hazards are those caused by the tools, machines, and substances that are used in everyday life. The technological hazards that should be considered in this geographic region are listed in Table 2.

Table 2: Technological Hazards Likely to Affect Florida

Hazard	Description	Geographical Considerations
Hazardous Materials - Fixed Facility	Any fixed site where chemicals are manufactured, used, or stored.	Major chemical spills can occur at any facility that produces, uses, or stores chemicals. Illegal dump sites can appear anywhere.
Hazardous Materials - Transportation	Transportation incidents involving hazardous substances occur when a vehicle carrying these materials is involved in a wreck that endangers public health or the environment. Because of their increased use, hazardous substances are transported by truck, train, ship, plane, or pipeline.	Areas at risk would be along highways, rail lines, pipelines, rivers, and port areas.
Radiological Materials - Transportation and Storage	The transportation and disposal of radioactive materials and waste creates problems because of the long life of radioactive materials. Although precautions are taken in packaging the materials, there is still concern that transportation incidents and other hazards could cause radiation exposure or pollution.	Dangers posed by radioactive wastes are concentrated in the immediate vicinity of the disposal sites or along the transportation routes.
Structural Fire and Explosion	Fires and explosions can result in uncontrolled burning in residential, commercial, industrial, or other properties in rural or developed areas.	Unintentional structural fires and explosions can strike anywhere. Though arson once was considered to be confined to major urban areas, it can occur in any community.

Step 3 - Develop the Plan

The emergency plan should outline basic preparedness steps needed to handle the anticipated emergencies at your work site. Although emergency plans are not meant to be all-inclusive, they should provide appropriate guidance on what to do in an emergency.

Plan Components

The Occupational Safety and Health Administration (OSHA) requires inclusion of the following elements in emergency plans:

- ◆ **Emergency Escape Procedures and Emergency Escape Route Assignments** *To ensure that all employees understand the general procedures to be followed, the plan must document procedures, such as equipment to shut down or suppression efforts, and the escape route to be followed by each specific facility location.*
- ◆ **Procedures for Employees Who Remain on Site after the Alarm Sounds** *Sometimes, depending on the type of operation involved, certain employees will remain behind to shut down special equipment before they evacuate the building. An employer might assign employees to shut down various process equipment to limit further damage to the equipment or to reduce potential hazards such as those from flowing liquids or gases under pressure.*
- ◆ **Procedures to Account for Employees** *The emergency action plan should include procedures for accounting for all employees after an emergency evacuation. It is important to know that everyone got out. For example, employees designated and trained as fire wardens often check all offices and rest rooms during an emergency evacuation.*
- ◆ **Rescue and Medical Duties** *Emergency action plans should indicate which employees are responsible for rescue and medical duties, and the plan should define what those duties are.*
- ◆ **Procedures for Reporting Emergencies** *The emergency action plan should outline the preferred means of reporting fires and other emergencies. For example, depending on the facility, employees may dial 9-1-1, dial an in-house emergency number, or pull a manual alarm.*
- ◆ **Contacts for Further Information** *The emergency action plan should include the names of employees who can be contacted for further information or for an explanation of duties under the plan.*

OSHA requires that employers record emergency action plans in writing unless there are 10 or fewer employees. If there are 10 or fewer employees, the employer may verbally communicate the plan. OSHA regulations for an emergency action plan are covered in OSHA standard 29 CFR 1910.38, *Employee Emergency Plans and Fire Prevention Plans*. OSHA states that the emergency action plan covers the “designated actions that employers and employees must take to ensure safety from fire and other emergencies.

- ◆ **Emergency Notification Systems** *The employer should establish a notification system. If the system is used for several purposes, then a distinctive signal should be used for each purpose. For example, a long horn blast followed by three short horn blasts could indicate a fire emergency, and a siren could indicate a tornado or severe weather warning.*
- ◆ **Evacuating the Premises** *The emergency action plan should indicate the types of evacuation that employees are to use during an emergency. For example, an exterior fire emergency could be indicated with a distinct signal for each of the following:*
 - Evacuate the building to safe area*
 - Evacuate specific plant area*
 - Evacuate all employees from entire plant.*
- ◆ **Training of Personnel** *OSHA requires that employers designate and train certain personnel to assist in safely evacuating employees during an emergency. Such trained employees are often called fire wardens.*

The OSHA required elements serve as the minimum requirements for emergency plans. An effective plan should include any useful information necessary to fulfill the plans' purpose.

The basic objectives of an emergency plan include:

- ◆ To set forth the functions and activities of employees during an emergency.
- ◆ To ensure that the activities coordinate with those of responding emergency workers and are not counterproductive to their efforts.
- ◆ To serve as an information resource to the emergency responders.
- ◆ To maintain documentation regarding all required tests of the facilities fire and life safety systems.

The following outline is suggested to ensure inclusion of all essential information in emergency plans.

Section 1. Responsibilities

The clear assignment of responsibility and lines of authority are important to making a successful emergency operations plan. Employees must know who is in charge and who will make decisions.

Portable fire extinguishers are a first line of defense for coping with small or incipient fires. To safeguard employees and property, employees should be trained to use portable fire extinguishers safely to suppress such limited fires and to protect evacuation routes. Ensuring that such training takes place is the responsibility of the employer. Some employers choose to require all of their employees to just evacuate the premises. This is an acceptable practice if this policy is written in the emergency plan and employees are informed of the expectation.

The Lakeland Fire Department provides fire extinguisher training, free of charge. To schedule a training session, contact the Public Education Office at 834-8201.

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- A. Prepare a policy statement that commits management and staff to the concept of emergency planning, regular plan review, and routine plan exercise.
 - B. Provide contact information for staff assigned responsibilities during an emergency.
 1. Safety Director
 2. Alternate Safety Director
 3. Additional Staff
 - C. Outline the scope and frequency of methods that will be used to keep the plan current.
 - D. Provide a plan and the procedures used to establish an ongoing emergency training program for personnel.
 1. Describe the topics to be covered and the frequency of the training.
 2. Maintain complete training and testing records, including participants in drills.

Section 2. Emergency Reporting

When a fire or other emergency is discovered, prompt notification of emergency responders is essential to minimize injury and damage.

- A. List automatic fire reporting systems and devices that will activate the alarm system.
 1. List the type of systems.
 2. Indicate all emergency control panel locations.
 3. List the name and telephone number of monitoring services.
- B. Outline procedures for employees notifying emergency personnel of an emergency by telephone. The following information should be provided to the 9-1-1 dispatcher:
 - ◆ Nature of the emergency
 - ◆ Correct building address
 - ◆ Location of emergency within the building, such as floor or wing
 - ◆ Any information concerning access to building and/or location of emergency
 - ◆ Caller's name and telephone number

The caller should be prepared to stay on the phone until instructed to hang up.

The Lakeland Fire Department offers a variety of programs and training sessions for local businesses. These can be customized to meet your needs. Call the Public Education office at 834-8201 to schedule a program.

The emergency telephone number is 9-1-1. If your facility uses a telephone system that requires accessing an outside line prior to dialing 9-1-1, the procedure should be outlined in detail. Posting the emergency phone number and the facilities physical address by all telephones is also recommended.

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- C. Outline the procedure to be followed when reporting a false alarm to the emergency dispatch center.

Section 3. Evacuation

The most effective means for protecting employees and other occupants of buildings is to eliminate exposure to the hazards of the emergency situation.

- A. Maintain a roster of all employees and their primary work location within the facility. Use this roster to account for all personnel when evacuating buildings.
- B. Prepare a list of meeting places on or near the premises where employees and other occupants are to report in the event of an emergency evacuation.
- C. Assign a warden who will be responsible for each area of the facility. Provide an outline of duties to be accomplished during an emergency. Duties might include:
- ◆ Ensuring all occupants have left the affected area, checking restrooms and secluded work or break areas
 - ◆ Closing doors
 - ◆ Account for all employees at meeting place
- D. Describe the people, methods, and procedures to be utilized when evacuating people that are not able to leave the affected area without assistance.
- E. Develop and distribute evacuation routes and procedures to be followed during emergency operations. This information should be included with new employee orientation information.

Section 4. Emergency Control Procedures

The owner and/or manager of the facility has the ultimate authority and responsibility for minimizing the extent of risk to the employees and property.

- A. Outline procedures to be followed during the various emergency situations that could affect the facility. Describe who, what, when, where, and how assigned tasks will be carried out. Specific tasks might include:
- ◆ Close doors
 - ◆ Call the emergency dispatch center (9-1-1)
 - ◆ Meet arriving emergency responders at the entrance to direct them to the emergency

Determine the needs of persons with disabilities and non-English-speaking personnel. The Americans with Disabilities Act (ADA) defines a disabled person as anyone who has a physical or mental impairment that substantially limits one or more major life activities, such as seeing, hearing, walking, breathing, performing manual tasks, learning, caring for oneself, or working.

- ◆ Shut down utilities
- ◆ Notify owner/management of emergency

Section 5. Post Emergency Operations

Security and clean-up are two key functions that must occur to minimize damage and loss following incidents causing damage to the facility.

- A. Describe procedures for returning the building to operating condition once the emergency is over. Consider the need for security for damaged areas.
- B. List the contact information for all contracted individuals or companies responsible for returning the building to normal operations following an emergency.

Section 6. Building Equipment Testing

Fire detection and suppression equipment must be periodically inspected, tested, and certified to ensure it is in operational condition.

- A. List the systems and equipment subject to periodic testing requirements. Include the required frequency of testing and any pertinent information, such as testing company and previous testing records.

Section 7. High-Value List

It is important for emergency responders to be aware of the location of high-value items and items that may pose additional hazards.

- A. List areas that contain high-value, water damage susceptible materials, and rooms containing combustible or hazardous materials.

Section 8. Shut-Off Valve List

Prompt shut down of equipment, water, or utilities may assist in minimizing damage.

- A. List the locations of all utility shut-off valves including water, power, gas, and sprinkler system main and sectional valves.
 - 1. Describe any unusual operating techniques
 - 2. List all locked out floors or areas and the location of the master keys for them.

Section 9. Floor Plans

Floor plans help emergency responders and building occupants familiarize themselves with the layout of the facility, location of exits, escape routes, and unique hazards.

Testing requirement information can be obtained from your Fire Inspector. Call the Fire Safety Management Division of the Lakeland Fire Department at 834-8201 for assistance.

The City of Lakeland Fire Code requires contractors to send reports to the Lakeland Fire Department documenting any system that is not performing correctly.

Access boxes are required for buildings containing alarm systems and/or sprinkler systems that were built after 1985. Access boxes *must* be obtained through the Lakeland Fire Department. Contact the Fire Safety Management Division at 834-8201 for more information.

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- A. Provide a copy of each unique floor plan showing the type of occupancy in each tenant area.
1. Indicate areas of open office space, retail space, labs, closed office configurations, storage, mechanical rooms, etc.
 2. For similar floors, supply one floor plan marked accordingly.

Section 10. Contact Lists

Quick communications with responsible persons is always helpful in an emergency.

- A. Provide a list including name, title, address, and all telephone numbers for the following:
- ◆ Building owner
 - ◆ Building engineer
 - ◆ Safety Director/Assistant
 - ◆ Insurance Agent
 - ◆ Service Companies
 - ◇ Elevator
 - ◇ Alarm systems
 - ◇ Fire protection systems
 - ◇ Air handling systems
 - ◇ Communications systems
 - ◇ Clean-up or debris removal
- B. Provide a list of emergency contact information for all employees.
- C. Provide employees with emergency contact information for your business. Ideally, this would be an off-site location they can call to get information in the event of a disaster and to notify the company, family, and friends that they are safe.
- D. Store copies of contact information at an off-site location so it is available in case of disaster.

A minimum of three copies of the emergency plan should be made. One copy should be kept by the main alarm panel, if present in the building. One copy should be made available to employees and one should be routinely reviewed by management.

The Lakeland Fire Department will review emergency plans, identifying any items for revision and information to be added. Contact the Fire Safety Management Division at 834-8201 if you have questions regarding the development of your emergency plan or to request a review of your plan.

Step 4 - Implement the Plan

Implementation means more than simply exercising the plan during an emergency. It means acting on recommendations made during the process, integrating the plan into company operations, training employees, and evaluating the plan.

- ◆ **Integrate the Plan Into Company Operations** *Emergency planning must become part of the corporate culture. Look for opportunities to build awareness, to educate and train personnel, and to test procedures. Also, look for ways to involve all levels of management, all departments, and the community in the planning process. Make emergency management part of what personnel do on a day-to-day basis.*
- ◆ **Conduct Training, Drills, and Exercises** *Everyone who works at or visits the facility requires some form of training. Specific training on the emergency plan should be part of new employee orientation and then conducted on an annual basis. This could include employee discussion sessions to review procedures, technical training in equipment use for employees assigned emergency response functions, evacuation drills, and full-scale exercises.*
- ◆ **Evaluate and Modify the Plan** *Conduct a formal audit of the entire plan at least once a year. Hold debriefing sessions following drills, or actual use of the plan, to determine areas of improvement. Include a page in the plan to denote date of revisions or the fact that an evaluation was performed and no revisions were needed.*

Refer to OSHA training requirements if your facility has a fire brigade, hazardous materials team, rescue team, or emergency medical response team.

Most businesses are required to hold periodic fire drills. Contact the Fire Safety Management Division of the Lakeland Fire Department for the requirements for your facility.

The ten most common errors found with emergency plans include:

- ◆ Lack of upper management support
- ◆ Lack of employee buy-in
- ◆ Poor planning or no planning
- ◆ Lack of training and practice
- ◆ Lack of a designated leader
- ◆ Failure to keep the plan up-to-date
- ◆ Lack of method of communication to alert employees
- ◆ OSHA regulations are not part of the plan
- ◆ Lack of procedures for shutting down critical equipment
- ◆ Employees are not told what actions to take in an emergency

Consolidate emergency plans with other safety and health related plans for better coordination. Stand-alone plans, such as a fire prevention plan, should be incorporated in the one comprehensive plan.

The fire prevention plan should outline basic procedures to prevent fire from occurring in your facility as well as to minimize injury to the occupants and damage to the property.

Plan Components

The Occupational Safety and Health Administration (OSHA) requires inclusion of the following elements in fire prevention plans:

- ◆ **List of Major Workplace Hazards** *The fire prevention plan should include a list of the major workplace fire hazards and their proper handling and storage procedures, potential ignition sources, control procedures, and the type of fire protection equipment or systems that can control a fire involving them.*
- ◆ **Personnel Responsible for Maintenance** *The plan should include the names or regular job titles of the personnel who are responsible for the maintenance of equipment and systems installed to prevent or control ignitions or fires.*
- ◆ **Personnel Responsible for Fuel Source Hazards** *The fire prevention plan should include the names or regular job titles of the personnel who are responsible for the control of fuel source hazards.*
- ◆ **Housekeeping** *Housekeeping procedures are included in the written fire prevention plan to specify the limits that have been established for routine use amounts of potential fuels, such as flammable and combustible liquids, and for waste or residual materials.*
- ◆ **Training** *Employers must make employees aware of the fire hazards of the materials and processes with which they work.*
- ◆ **Maintenance** *The employer must regularly and properly maintain the equipment and systems installed on heat-producing equipment to prevent the ignition of combustible materials and these maintenance procedures must be included in the written fire prevention plan.*

OSHA outlines the minimum requirements for a fire prevention plan. Expand on these requirements to improve the effectiveness of your plan and to make your plan fit the needs of your facility.

OSHA requires that a written copy of the facility's fire prevention plan be kept in the workplace and be made available for employees to review. For organizations with 10 or fewer employees, a written plan is not required; the employer can communicate the plan verbally to employees. The employer is required to review with each employee the parts of the plan that are specific to that employee's ability to protect himself or herself in an emergency.

References

- Attard, Janet. *Emergency Planning for Small Businesses*.
<<http://www.buisnessknowhow.com/manage/disaster.htm>>
(31 January 2003).
- Colonna, Guy R. ed. *Introduction to Employee Fire & Life Safety*,
National Fire Protection Association, 2001.
- Emergency Preparedness U.S.A.* Federal Emergency Management
Agency, 1998.
- Griffith, Carl and Rick Vulpitta. *Effective Emergency Response Plans*.
October 10, 2001.
<<http://www.nsc.org/issues/emerg/99esc.htm>.> (7 April
2003).
- Hagan, Philip E., John F. Montgomery, and James T. O'Reilly.
*Accident Prevention Manual for Business and Industry Administration
& Programs, 12th edition*. National Safety Council, 2001.
- Occupational Safety and Health Administration. *Evacuation
Plans and Procedures eTool: Emergency Action Plan*.
<<http://www.osha.gov/SLTC/etools/evacuation/eap.html>>
(31 March 2003).
- Occupational Safety and Health Administration. *Standards - 29 CFR*.
<<http://www.osha.gov>.> (31 March 2003).
- SafetyInfo. *Emergency Planning—4 Steps in the Planning Process*.
<[http://www.safetyinfo.com/safetyinfo/html/aa-gues-
info/emergency4-step-process.htm](http://www.safetyinfo.com/safetyinfo/html/aa-gues-
info/emergency4-step-process.htm).> (28 January 2003).
- Sawyer, Steven F. and Martha H. Curtis. eds. *NFPA Fire Prevention Code
Handbook, 2000 Edition*. National Fire Protection Association,
2000.
- Seattle Fire Department. Information Bulletin #986. *Fire Evacuation
Planning for Low-Rise Buildings*. Seattle Fire Department, 2001.
- Seattle Fire Department. Information Bulletin #2001-1. *Emergency
Operations Plan*. Seattle Fire Department, 2001.

