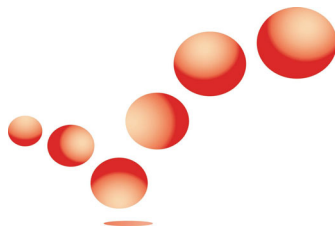


Emergency Planning Essentials

Essential Guidelines For Keeping Your People and Property Safe During Emergencies & Disasters



Presented By
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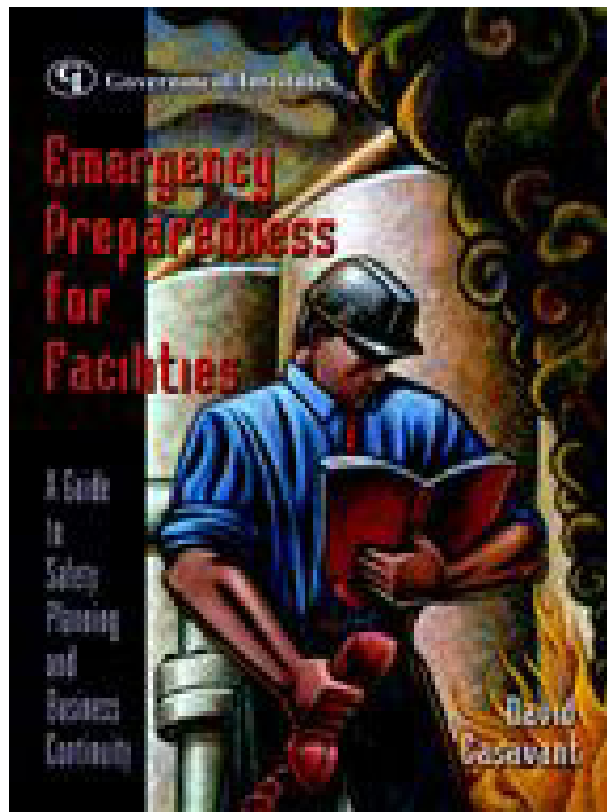
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What You Must Do to Keep Safe & Secure

The goal of this E-book is to provide readers with a quick overview of what is required to achieve emergency planning excellence. For more in depth “how to” information, please request a copy of:

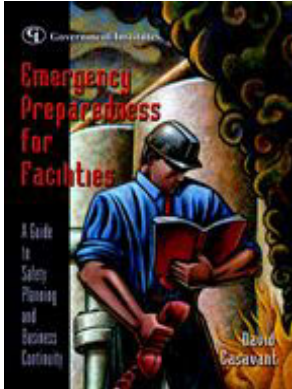
Emergency Preparedness For Facilities – A Guide to Safety Planning and Business Continuity”



Available now at
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Emergency Preparedness for Facilities, is a business survival "checklist" that provides you with step-by-step instructions for developing prevention and response plans for all types of emergencies and disasters.



This comprehensive resource helps you create an organization-wide emergency management plan that ensures that all procedures are in place and all equipment and personnel needs are addressed so your company can respond to an emergency situation quickly and instinctively. You will feel confident that your employees are trained and prepared to put their plan into action and protect all workers, property, and the life of the company in the face of any natural or non-natural emergency event.

Emergency Preparedness for Facilities identifies and examines nineteen natural and non-natural emergencies, defined as anything that disrupts an organization, including:

- Terrorism
- Chemical & Biological Attack
- Bomb Threat
- Fire
- Flood
- Loss of Utility
- Civil Disturbance
- Tornado
- Workplace Violence

Emergency Preparedness for Facilities references and explains all relevant **OSHA requirements**, including the completion of OSHA Forms 300, 301, and 300A after an accident.

Special Bonus: This resource includes a companion **CD-ROM** that contains the **forms and templates** you will need to prepare for an emergency and to create a complete emergency preparedness plan. Also included are

- **an annual emergency assessment form.**
- **an emergency action plan template (38 pages in length).**
- **a post-event assessment form.**
- **a correspondence log.**
- **OSHA recordkeeping forms.**

For a full preview of the table of contents, please see pages 30 – 37 of this e-book.

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Section 1

Categories of Emergencies

Introduction - What Exactly Is An Emergency?

Typically, emergency events can be classified into two separate groups, natural events and non-natural events. The list below identifies examples of each category.

Natural Events

- Fires
- Drought
- Hurricane
- Tornado
- Tidal Wave
- Blizzard
- Avalanche

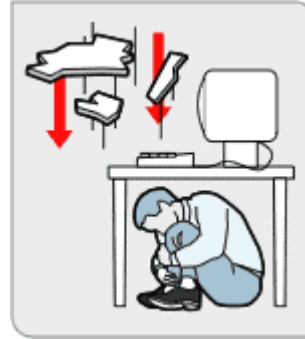
Non-Natural Events

- Loss of utility
- Loss of communications
- Arson
- Water leak
- Chemical spill
- Acts of war
- Riots or demonstrations
- Bomb threat
- Medical emergency
- Workplace violence
- Nuclear accident

Of course this list is not an all-inclusive one. It identifies many of the events that you may be exposed to. When considering possible emergencies, remember to think about all events that might occur. As you read this book, you'll learn that many events we feel have little chance of occurring might actually befall us.

With proper planning you can significantly reduce the impact of the event. In many instances, with proper planning, you can even prevent the emergency from occurring in the first place!

Categories of Emergencies – Natural Events



Earthquakes

What To Do If Faced With An Earthquake

The first step is to determine the probability of an earthquake affecting your location. Next, you should have a detailed plan for handling this emergency. Basic elements of this plan should include:

- Safe locations in the building
- Danger locations in the building
- Practice drills
- Utility shut off locations
- Evacuation staging areas
- Communication procedures with employees & families

It is important to understand that immediately after an earthquake; all emergency personnel will be reacting to critical crisis. For this reason you should be able to be self sufficient for at least seventy-two hours. Keep this in mind when preparing your plan and survival kit. See page 27 of this report

During an earthquake it is imperative that you remain calm. The majority of injuries during an earthquake occur when people rush to enter or exit a building. If you are indoors take refuge beneath a desk or table. If that is not possible, move toward an inside wall away from items that could fall and injure you such as bookcases, vending machines, lighting and other fixtures.

If you are outdoors move away from buildings, radio towers, light poles and overhead utility lines. In a high rise building, stay off of elevators. If you are on an elevator when an earthquake occurs, stay clam. The elevator may quit working. If power is lost, most elevators will automatically go to the lowest level. Don't be surprised if fire alarms or fire sprinkler systems go off.

[For more information on how to determine your earthquake risk and how to prepare for earthquakes, please see page 18 of the **Emergency Preparedness For Facilities Book.**](#)

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Fire

What To Do If Faced With a Fire

The Occupational Safety and Health Act requires that employers protect employees from fire and other emergencies. Part 1910 of the OSHA act addresses general industry, which would cover most operating facilities. Specifically 1910.38 (b) (1-5) requires the following components:

- A list of all the major workplace fire hazards and their proper handling and storage requirements.
- Potential ignition sources (i.e. welding, smoking)
- Type of fire protection available to control each hazard
- Names of personnel responsible for maintenance of equipment installed to prevent or control fires.
- Names of personnel responsible for controlling ignition sources
- Maintenance plan for fire equipment or systems (i.e. inspections and certifications)
- Housekeeping procedures to ensure that work area is kept free from accumulations of flammable and combustible materials.
- Evacuation procedures

In addition to these distinct requirements, OSHA requires employers to provide adequate training to employees. The training must apprise employees of the fire hazards of the materials and processes to which they are exposed. The written plan must be available for all employees to review.



If There is a Fire

- Exit the building ASAP.
- Crawl low if there is smoke
- Use a wet cloth, if possible, to cover your nose and mouth.
- Use the back of your hand to feel the upper, lower, and middle parts of closed doors.
- If the door is not hot, brace yourself against it and open slowly.
- If the door is hot, do not open it. Look for another way out.
- Do not use elevators
- If you catch fire, do not run. Stop-drop-and-roll to put out the fire.
- If you are at home, go to a previously designated meeting place.
- Account for your family members and carefully supervise small children.
- Never go back into a burning building.

[For more information on how to reduce the risk of fire please see page 23 of the **Emergency Preparedness For Facilities** book.](#)

Floods

What to Do If Faced With a Flood

The first prudent step is to determine the risk of flood in your area. Fortunately good information is available to determine your risk exposure. Start by examining your surroundings. Properties located in valleys or land that borders water is most susceptible. If a water dam is within fifty miles of your property, consider your risk to be elevated.

- Determine your risk
- Tune into your NOAA radio
- Be aware evacuation routes
- Have sandbags and pump available

[For more information about floodplains and how to access your risk, please see page 26 of the **Emergency Preparedness For Facilities** book.](#)

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Understanding the Terminology

Flood Watch

Floodwaters are possible in the given area of the watch and during the time frame identified in the flood watch. Flood watches are usually issued for flooding that is expected to occur at least 6 hours after heavy rains have ended

Flood Warning

Flooding is actually occurring or is imminent in the warning area.

Flash Flood Watch

Flash Flooding is possible in the given area of the. Flash flood watches are usually issued for flooding that is expected to occur within 6 hours after heavy rains have ended.

Flash Flood Warning

Flash flooding is actually occurring or is imminent in the warning area.

Hurricanes

Understanding The Terminology

To properly prepare for storm season you must be familiar with the weather related terminology used. As storm season approaches these terms will be used with more frequency. Not understanding the difference between a tropical storm watch and a hurricane warning can be deadly. Storm advisories are issued by the National Weather Service (NWS) and the following terms are used to describe a storm's threat.

- Tropical Storm Watch
Within the next 36 hours, tropical storm conditions (winds from 36 to 73 mph) are possible in the storm watch area.
- Tropical Storm Warning
Within the next 24 hours, tropical storm conditions (winds from 36 to 73 mph) are expected in the storm warning area.
- Hurricane Watch
Within the next 36 hours, hurricane conditions (sustained winds greater than 73 mph) are possible in the hurricane watch area.

- Hurricane Warning
Within the next 24 hours, hurricane conditions (sustained winds greater than 73 mph) are expected in the hurricane warning area.

When we think of hurricanes we usually think of high winds; however hurricanes often produce torrential rains, flash floods, storm surges and tornados. Although the strong winds of a hurricane do incredible damage, often it is these byproducts of the hurricane that inflict the greatest damage.

Additionally, the following severe weather watches and warnings may be issued:

- Flood Watch
Floodwaters are possible in the given area of the watch and during the time frame identified in the flood watch. Flood watches are usually issued for flooding that is expected to occur at least 6 hours after heavy rains have ended
- Flood Warning
Flooding is actually occurring or is imminent in the warning area.
- Flash Flood Watch
Flash Flooding is possible in the given area of the. Flash flood watches are usually issued for flooding that is expected to occur within 6 hours after heavy rains have ended.
- Flash Flood Warning
Flash flooding is actually occurring or is imminent in the warning area.
- Tornado Watch
Tornados are possible in the given area of the watch.
- Tornado Warning
A tornado has actually been sighted by a spotter or by radar and is occurring or is imminent in the warning area.

Saffir-Simpson Rating and Storm Categories:

- 1. Minimal**--Winds of 74 to 95 MPH Damage is minimal, usually limited to trees and power lines.
- 2. Moderate**--Winds of 96 to 110 MPH Some roof damage may occur. Trees can be uprooted and power poles can be downed. Windows and storefronts can be damaged.
- 3. Extensive**--Winds of 111 to 130 MPH Roofs are badly damaged or lost, structural damage is common.
- 4. Extreme**--Winds of 131 to 155 MPH Damage to most structures is severe. Extreme flooding can occur along and near the coast. Loss of life is common.
- 5. Catastrophic**--Winds in excess of 155 MPH Damage is total in many places, many structures are destroyed. Severe flooding is common several miles inland.

What To Do If Faced With a Hurricane

Before The Storm

You'll need to know the best and safest route out of town, especially if you are in a low lying coastal area and a storm is imminent.

Evacuation routes should take you a minimum of fifty miles inland, and depending on the storm, that may not be enough. Hurricanes tend to weaken as they pass over land, but a large hurricane can be 600 miles in diameter.

Storm Activities

Immediately prior to, during and after any emergency it is often difficult to think clearly and rationally. A hurricane affords you the ability to use a checklist to insure all critical issues are dealt with. Don't leave storm preparation and recovery steps to chance!

A good storm activity list specifically addresses issues that must be addressed prior to the storms arrival. It must identify critical tasks that must be completed at the following time increments:

- Seventy-two hours prior to the storms arrival,
- Thirty-six hours prior to the storms arrival,
- Twenty-Four hours prior to the storms arrival, and
- After the storm has passed.

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The activity list also identifies the responsible employee or contractor and includes space for their phone numbers. As each activity is completed, simply highlight (electronically or manually) and move on to the next activity. This activity list should be distributed to all of your emergency management team. This form works well as a discussion base during conference calls before and after the storm.

[For examples of a storm activity list and detailed instruction on how to use it, please see page 29 of the *Emergency Preparedness For Facilities* book.](#)

While conducting audits of your building and grounds, be aware of downed power lines and broken water or sewer lines. Report these problems immediately to the proper utility company, police or fire department. Don't try to negotiate around downed electrical lines. Be safe – and smart!

For areas susceptible to storms, keeping a stockpile of food and other necessities is essential. If you keep a supply of necessities, don't forget that most of these items have a limited shelf life. Plan to rotate items such as food and batteries on an annual basis.

Tornados

What To Do If Faced With a Tornado

Because of the "surprise" element of tornados, advance preparation is a must. Basic to this preparation is an understanding of exactly where designated shelters are located. This includes not just at the workplace but at home as well. If you do not have a designated shelter nearby or the close proximity of a tornado precludes you from accessing the shelter, you must be aware of safe refuges available within the building. Here are a few of the guidelines:

- If you spot a tornado, immediately call 911 to report it
- Stay away from windows and doors
- If available, move to the basement
- If a basement is not available, go to a small interior room
- Stay on the lowest level of the building
- Stay tuned to the television or radio for further instructions
- Have access to a first aid kit and stored food & water

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Understanding the Terminology

Tornado Watch: Tornadoes are possible in the given area of the watch.

Tornado Warning: A tornado has actually been sighted by a spotter or by radar and is occurring or is imminent in the warning area.

Fujita Tornado Categories

Category F0	Gale tornado 40 – 72 mph.	Light damage. Some sign damage. Tree branches broken and shallow-rooted trees will be toppled.
Category F1	Moderate tornado 73 – 112 mph.	Moderate damage. Roofing tiles loosen and take flight. Moving automobiles pushed off roads. Mobil homes may come off foundations.
Category F2	Significant Tornado 113 – 157 mph	Significant damage. Large trees are uprooted. Mobil homes are demolished. Roofs are torn off of some homes.
Category F3	Severe Tornado 158 – 206 mph	Severe damage. Cars can be lifted into the air and thrown about. Small missiles are generated. Roofs on well-constructed buildings are torn off.
Category F4	Devastating Tornado 207 – 260 mph.	Devastating damage. Large missiles are generated. Well constructed buildings are demolished.
Category F5	Incredible Tornado 261 – 318 mph.	Incredible damage. Trees will be debarked. Well constructed building will be lifted off their foundations. Automobile sized missiles will travel in excess of 100 yards.

[For more information on how to prepare for and survive a tornado, please see page 39 of the **Emergency Preparedness For Facilities** book.](#)

Tsunamis

What To Do If Faced With a Tsunami

The logical starting point for tsunami preparation is to first determine if you are in an area that is susceptible to tsunamis.

If you find that you are in an area susceptible to tsunamis you must:

- Understand evacuation routes (50 feet above sea level and one mile in from the coast)
- Don't limit yourself to a single evacuation
- Have on hand an emergency survival kit (Typical contents are identified at page 26 of this E-book)

After the tsunami has reached land and the danger has passed the first responsibility is to assist those injured. Do not attempt to move those seriously injured unless their location places them in additional danger. The following items should be addressed as well:

- Check for gas and water leaks. Turn off or report to utility company immediately
- Check for downed power lines. Report to utility company
- Examine the building for obvious structural damage. Warn others
- Tune into your radio for further information
- Cooperate fully with public safety officials
- If possible stay off the roads. Emergency personnel should be given first priority

After the tsunami has passed and you are given the OK to return to your buildings, immediately evaluate the buildings condition. If any doubt exists as to the safety or structural integrity of the building, do not enter it until professional advice has been given. If the building is safe to enter, you should open all doors and windows to dry out the building. If water has saturated the carpets, have them cleaned and treated immediately. If water is still standing onsite you should set up sump pumps to evacuate the water. If extensive water damage has occurred, aggressive cleanup steps must be taken, followed by testing for indoor air quality. If the damp environment remains, mold and mildew could develop, costing even more and creating unwanted health problems.

[For more information on how to determine your tsunami risk and how to survive a tsunami please see page 42 of the **Emergency Preparedness For Facilities** book.](#)

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Volcano

What To Do If Faced With a Volcano

The logical starting point for volcano preparation is to first determine if you are in a danger zone. Other prudent measures include:

- Understand the local warning system
- Understand evacuation routes (avoid low lying areas & valley's)
- Don't limit yourself to a single evacuation
- Have on hand an emergency survival kit (Typical contents are identified at page 27 of this E-book)

After the initial eruption, danger is still present due to volcanic ash and poisonous gasses. Stay tuned to your radio for further instructions. Do not attempt to reenter the danger zone until the all clear has been given by the authorities. Because the volcanic ash may continue to flow, even after you are allowed to reenter your location, you must take safety precautions. Always wear a respirator and have on hand extra filter cartridges for this type of dust flow. Since our eyes are perhaps the most sensitive organs we have, be sure to wear safety goggles at all times. Hard sole shoes, long pants and long sleeves are also recommended for safety reasons. For those with allergies or asthma, it would be advisable to not enter the affected areas until the ash flow has ceased and the surrounding areas have been cleaned.

[For more information on how to determine your volcano risk and how to survive a volcano eruption please see page 46 of the **Emergency Preparedness For Facilities** book.](#)

Categories of Emergencies – Non-Natural Events

Bomb Threat

What To Do If Faced With a Bomb Threat

The best defense against a bomb attack is preparation. Those that have a plan for the eventuality of a bomb threat are in the best position to survive the threat of attack. Even if your facility is ultra-secure, it remains impossible to eliminate a bomb threats. A threat can be carried out by anybody with access to a telephone. Even if an actual attack never materializes, the threat can cause major disruptions and expense. Upon receiving a threat, one must be prepared for some sort of action. The usual first course of action is evaluation. You must be prepared to evaluate the threat and its legitimacy. This is not an exact science and is open to interpretation, but without some standard method of evaluation you will be ill prepared for the threat.

The Bomb Threat Checklist

This checklist gives the recipient a list of questions to ask the caller. Some questions are obvious such as "When is the bomb going to explode" and "Where is the bomb located" while other questions seem less obvious. Questions such as "What is your name" and "Where are you calling from" might not be answered by the caller, but stranger things have happened! Even if all of the questions on this checklist are not answered, it keeps the caller on the phone line for an extended period of time and that will assist the authorities in tracing the call. Another section of the checklist is setup so the recipient can circle a description of the caller's voice. This may help to identify the caller and may assist you in determining the legitimacy of the threat. For instance, if the caller sounded stressed and were crying, you might decide the threat to be a real one. However, if the caller sounded young and was giggling while speaking, you may determine that call to be a prank.

This bomb threat checklist should be copied onto a bright colored paper that stands out amidst the typical clutter in an office. In the event of a threat by telephone, the recipient can quickly find the checklist and take the appropriate notes.

To Evacuate or Not

Due to the increased demands on local police departments and other related agencies, the decision to search for a bomb and the call for an evacuation is one that will be made by you, the building owner or manager. The police or fire department will defuse and remove the bomb, once you find it!

Faced with a bomb threat you have three basic options:

1. Ignore the threat
2. Evacuate immediately
3. Search for the bomb and evacuate if necessary.

Be sure to have a well thought out plan for each of these options. For assistance with these plans be sure to visit page 143 of the *Emergency Preparedness For Facilities* book.

The Bomb Search

At some point, especially if the threat seems to have merit, the decision to conduct a search for the bomb will need to be made. As mentioned previously, the actual bomb search will likely be conducted by the building manager or owner. If this describes your situation, now is the time to identify processes and procedures and communicate them to the responsible parties.

If an actual sweep and search of the premises becomes necessary, it should be conducted in an efficient and safe manner. This procedure entails five steps:

- Step #1: Enter the room. Stop, look and listen.
- Step #2: Divide the room by height for search.
 - Zone 1: Floor to waist
 - Zone 2: Waist to chin
 - Zone 3: Chin to ceiling
 - Zone 4: Above false (drop) ceiling
- Step #3: Search room by zone and assigned area. Overlap if necessary.
- Step #4: Search the interior public areas.
- Step #5: Search the outside areas.

In the Event of an Explosion

- Take shelter against your desk or a sturdy table.
- Exit the building ASAP.
- Do not use elevators.
- Check for fire and other hazards.
- Take your emergency supply kit if time allows.

Chemical & Biological Concerns

What To Do If Faced With a Chemical or Biological Threat

Many potential terrorist attacks could send tiny microscopic "junk" into the air. For example, an explosion may release very fine debris that can cause lung damage. A biological attack may release germs that can make you sick if inhaled or absorbed through open cuts. Many of these agents can only hurt you if they get into your body, so think about creating a barrier between yourself and any contamination.

If you fear an exposure to chemical or biological agents immediately seal or cover the envelope or package. Leave the room and if possible lock it, making sure nobody is able to come in contact with the package in question. Wash your hands with soap and water to prevent spreading. Notify your building manager and local police department. Finally, make a list of everybody who was in the room when the package was opened. Pass that list to your local public health department.

One of the greatest concerns for building managers is the potential for biological agents to be spread via the HVAC system. Many building owners and managers have created a process that will allow them to shut down the entire HVAC system (including intakes, dampers etc.) with one flip of a switch. In the past, this required many switches be turned off and was time consuming and not always completed correctly.

Nose and Mouth Protection

Face masks or dense-weave cotton material, that snugly covers your nose and mouth and is specifically fit, is the preferred method of protection from biological and chemical contamination. In the event proper protection is not available, be prepared to improvise with what you have on hand to protect your nose, mouth, eyes and cuts in your skin.

Anything that fits snugly over your nose and mouth, including any dense-weave cotton material, can help filter contaminants in an emergency. It is very important that most of the air you breathe comes through the mask or cloth, not around it. You may not eliminate all of the contamination, but limiting how much "junk" gets into your body may impact whether or not you get sick or develop disease.

Shelter In Place

There are circumstances when staying put and creating a barrier between yourself and potentially contaminated air outside, a process known as "shelter-in-place," is a matter of survival. You can use these things to tape up windows, doors and air vents if you need to seal off a room from outside contamination.

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Consider precutting and labeling these materials. Anything you can do in advance will save time when it counts. The following items should be at the ready:

- Heavyweight plastic garbage bags or plastic sheeting
- Duct tape
- Scissors

Once you have sealed a room with plastic sheeting and duct tape you may have created a better barrier between you and any contaminants that may be outside. However, no seal is perfect and some leakage is likely. In addition to which, you may find yourself in a space that is already contaminated to some degree.

If There is a Biological Threat

A biological attack is the deliberate release of germs or other substances that can make you sick. Many agents must be inhaled, absorbed through cuts in the skin or eaten to make you sick. Some biological agents, such as anthrax do not cause diseases that are contagious. Others, like the smallpox virus, can result in illnesses you can catch from other people. Many of these agents can only hurt you if they get into your body, so think about creating a barrier between yourself and any contamination.

Unlike an explosion, a biological attack may or may not be immediately obvious. While it is possible that you will see signs of a biological attack, as was sometimes the case with the anthrax mailings, it is perhaps more likely that local health care workers will report a pattern of unusual illness or there will be a wave of sick people seeking emergency medical attention.

If you become aware of an unusual and suspicious release of an unknown substance nearby, it doesn't hurt to protect yourself. Quickly get away. Cover your mouth and nose with layers of fabric that can filter the air but still allow breathing. Examples include two to three layers of cotton such as a t-shirt, handkerchief or towel. Otherwise, several layers of tissue or paper towels may help. Wash with soap and water and contact authorities.

Symptoms & Hygiene

If any of the symptoms below develop, keep that person separated from others if possible, practice good hygiene and cleanliness to avoid spreading germs, and seek medical advice.

- A temperature of more than 100 degrees
- Nausea and vomiting
- Stomachache
- Diarrhea
- Pale or flushed face
- Headache
- Cough

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- Earache
- Thick discharge from nose
- Sore throat
- Rash or infection of the skin
- Red or pink eyes
- Loss of appetite
- Loss of energy or decreases in activity
- Hygiene
- If someone is sick, you should practice good hygiene and cleanliness to avoid spreading germs.

[For more information on how to prepare for chemical and biological exposure please see page 61 of the *Emergency Preparedness For Facilities* book.](#)

Chemical Spills & Contamination

What To Do If Faced With a Chemical Spill

You should be concerned not only with the potential chemical spill within the confines of your business operations, but also with off-site spills at nearby businesses that could affect you as well. A natural gas plant across the street from your facility could experience problems that would directly affect your business.

The obvious starting point is to identify hazardous chemicals kept on-site. This requires an audit of janitorial closets, shop areas, mechanical rooms, production floors and other related areas. While listing the chemicals present, look for properly labeled containers that identify the chemical and the hazards. This is important especially in secondary containers (small containers and spray bottles). Next, each chemical should have a Material Safety Data Sheet (MSDS), which describes its hazards. By law, this MSDS must be provided to you by the manufacturer or the distributor of the chemical. MSDS's are created for all chemicals, even those that do not present a great danger (i.e. Windex).

Consider the following helpful hints when developing your chemical spill plan:

- Ask the local fire department to assist you in planning response procedures.
- Ensure that all containers storing chemicals are properly labeled.
- Verify that all chemicals have an MSDS available.
- Keep your MSDS logbook in a central location available to all employees.
- Train employees to properly handle and store chemicals.
- Train employees to recognize and how to properly handle chemical spills.
- Establish procedures to communicate a spill to employees, management and if necessary, the proper local agencies.
- Establish and communicate safe evacuation procedures.

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Finally, you should identify other facilities in your area that use, transport or produce hazardous chemicals. Determine whether a chemical spill at their location could affect your facility and if it can, address how you will handle that emergency. Think about power plants, refineries, mills, highways, waterways and railroads. Think worst-case scenario.

If an announcement is made instructing you to “shelter in-place”, you should not attempt to leave the building. It has been determined that the chemical has been released and exposure is likely to occur if you leave the protective confines of the building. If a shelter in-place order is given, here are a few steps you should initiate:

- Close and lock all doors and windows
- Seal all openings around doors with wet towels.
- Close all fireplace chimney dampers
- Turn off all HVAC equipment and close or seal all fresh air intakes.
- Seal off, using plastic visqueen and duct tape, all other openings such as vents and exhaust fans.

Possible Signs of Chemical Exposure

The following events could be a sign of chemical contamination:

- Many people suffering from watery eyes
- Twitching
- Choking
- Difficulty in breathing
- Loss of coordination
- Many sick or dead birds, fish or small animals

If you think you may have been exposed to a chemical, strip immediately and wash, using soap if available. Be sure not to scrub the chemical into your skin. When done, immediately seek further medical attention.

[For more information on how to prepare for chemical spills and exposure please see page 66 of the **Emergency Preparedness For Facilities** book](#)

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Medical Emergencies

What To Do If Faced With a Medical Emergency

If employees are expected to react properly during a medical emergency, employers must have a procedures manual in place. This manual will describe in detail what events should take place during a medical emergency. For instance:

- Which employees (names & phone numbers) have emergency medical response training?
- Location of the first aid kit or station.
- First aid procedures.
- Proper disease transmission avoidance.
- Injury and illness recordkeeping (OSHA) procedures
- How do you reach outside assistance (i.e. dial 911)?
- If you dial 911, must you first dial "9" to get an outside line?

Nuclear Threat and Exposure

What To Do If Faced With Nuclear Exposure

A nuclear blast is an explosion with intense light and heat, a damaging pressure wave and widespread radioactive material that can contaminate the air, water and ground surfaces for miles around. While experts may predict at this time that a nuclear attack is less likely than other types, terrorism by its nature is unpredictable.

The Nuclear Regulatory Commission requires that nuclear power plants have a system for notifying the public in the event of an emergency. There exist four standard classifications of emergencies, including:

- Notification of Unusual Event – This is a non-specific warning and is the least serious of the four categories. The event poses no danger to employees or the public and no action (i.e. evacuation) is required of the public.
- Alert – This classification is declared when an event has occurred that could jeopardize the plants safety, but backup systems are in place. Emergency agencies are notified but no action is required from the public.
- Site Area Emergency – This classification is declared when an event has caused a major problem with the plants safety system and has progressed to a point where a release of radiation into the air or water is possible, but would not exceed regulations instituted by the Environmental Protection Agency. No action is required by the public.

- General Emergency – This classification is the most serious and comes when the plants safety systems have been lost. Radiation could be released beyond the boundaries of the plant. Emergency sirens will sound and some people will be evacuated or instructed to remain sheltered in place. Listen for more specific instructions.

If you receive an alert remember the following:

- A siren or tone alert does not necessarily mean you should evacuate. Listen to the television or radio for further instructions.
- Do not call 911. If this is a true alert, a special rumor control phone number will be provided.
- If you are instructed to shelter in place, be sure to close all doors, windows, chimney dampers, and turn off all HVAC equipment.



In the Event of a Nuclear Exposure

- Take cover immediately, below ground if possible
- Consider if you can get out of the area or if it would be better to go inside a building and follow your plan to "shelter-in-place."

In order to limit the amount of radiation you are exposed to, think about shielding, distance and time. Typically there are three ways to minimize radiation exposure:

- Time – Limit the time you spend near radiation. This seems obvious, but it's worth repeating. During an exposure event local authorities will monitor the radiation, which should decrease over time. They will inform the public when the danger has passed.
- Distance – The farther you are away from the source of radiation the better. For this reason, local authorities will likely evacuate those near the radiation release.

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- Shielding – Human skin is very sensitive and does little to insulate the internal organs from the effects of radiation. Other materials such as concrete and steel, in buildings for instance, may provide some shield from radiation for short durations. For this reason, you may be asked to shelter in place.

If you receive a warning and you are instructed to go inside, it is advisable to shower and change clothes. After removing your clothes and shoes, place them in a plastic bag and seal the bag.

Dirty Bomb

A radiation threat or "Dirty Bomb" is the use of common explosives to spread radioactive materials over a targeted area. It is not a nuclear blast. The force of the explosion and radioactive contamination will be more localized. While the blast will be immediately obvious, the presence of radiation will not be clearly defined until trained personnel with specialized equipment are on the scene. As with any radiation, you want to try to limit exposure.

If There is a Radiation Threat or "Dirty Bomb"

To limit the amount of radiation you are exposed to, think about shielding, distance and time.

- Time – Limit the time you spend near radiation. This seems obvious, but it's worth repeating. During an exposure event local authorities will monitor the radiation, which should decrease over time. They will inform the public when the danger has passed.
- Distance – The farther you are away from the source of radiation the better. For this reason, local authorities will likely evacuate those near the radiation release.
- Shielding – Human skin is very sensitive and does little to insulate the internal organs from the effects of radiation. Other materials such as concrete and steel, in buildings for instance, may provide some shield from radiation for short durations. For this reason, you may be asked to shelter in place.

Shelter in Place

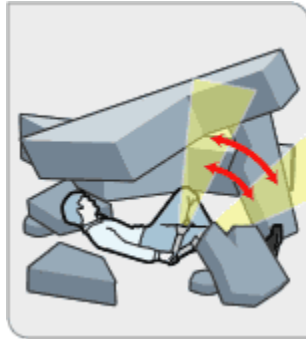
If a shelter in-place order is given, here are a few steps you should initiate:

- Close and lock all doors and windows
- Seal all openings around doors with wet towels.
- Close all fireplace chimney dampers
- Turn off all HVAC equipment and close or seal all fresh air intakes.
- Seal off, using plastic visqueen and duct tape, all other openings such as vents and exhaust fans.

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[For more information on how to prepare for nuclear exposure please see page 77 of the ***Emergency Preparedness For Facilities*** book.](#)

Structural Collapse



If You Are Trapped in Debris

- If possible, use a flashlight to signal your location to rescuers.
- Avoid unnecessary movement so that you don't kick up dust.
- Cover your nose and mouth with anything you have on hand. (Dense-weave cotton material can act as a good filter. Try to breathe through the material.)
- Tap on a pipe or wall so that rescuers can hear where you are.
- If possible, use a whistle to signal rescuers.
- Shout only as a last resort. Shouting can cause a person to inhale dangerous amounts of dust.

Because of the specialized nature of search and recovery and the danger inherent to that type of work, it is advisable that you bring in professionals to coordinate your rescue efforts when a building collapse has occurred. FEMA has developed and can deploy teams of trained response personnel to coordinate your activities.

[For more information on how to recover after structural collapse please see page 80 of the ***Emergency Preparedness For Facilities*** book.](#)

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Workplace Violence

What To Do If Faced With Workplace Violence

OSHA requires that employers address workplace violence issues. Specific regulations have not been created, but OSHA's General Duty Clause covers all safety issues, such as ergonomics, indoor air quality and workplace violence. OSHA requires that employers initiate a safe and healthy workplace and:

- Identifying hazards in the workplace
- Create a written safety plan
- Must perform regular safety inspections
- Safety and health training must be provided
- Injury and illness recording & reporting
- Management must be committed to safety
- Employee's must participate
- Employers should evaluate this program periodically

Often time's behavior recognition and environmental controls are important factors to consider when attempting to reduce occurrences of workplace violence.

Behavior solutions might include:

- Don't give orders.
- Remain calm
- Show a caring attitude
- Don't touch the other person
- Don't raise your voice
- Don't match the threats
- Use calming language such as "I know you're frustrated, let me try to help".

Environmental solutions might include:

- Provide security (or better security)
- Install metal detectors, cameras or security personnel
- Restrict areas that the public can enter
- Do not allow the public to enter the office area of the building
- Provide alarms (verbal, mechanical and/or visual) to warn of danger
- Provide adequate illumination at entryways, parking lots, corridors and other areas
- Provide escorts to the parking lot at night
- Ensure that employees are aware of the location of emergency exits
- Install deep transaction counters to limit physical contact with the public

In the event of a workplace emergency, first responders such as the sheriffs department and emergency medical technicians need to know exactly where

to go to assist the victims and apprehend the perpetrators. These responders are unlikely to be familiar with your building and therefore you should assist them by having this information available prior to their entry into the building. In the Columbine High School emergency, floor plans were not available to the first responders. Students had to draw crude floorplans from memory so the responders could figure the most appropriate action to take.

[For more information on how to prepare for workplace violence please see page 82 of the **Emergency Preparedness For Facilities** book.](#)

Section 2

Emergency Inventory & Assistance

Contractor Availability

Obviously, your organization will have key people assigned to lend their assistance during and after emergency events. Business units such as human resources, procurement, engineering and facility management will play an important role in preparation and recovery. No doubt outside assistance will be needed as well. With this in mind a list of available contractors should be created. The Contractor Availability Form works well for this task.

Understand that a contractor may agree to offer assistance after the emergency event, but because of circumstances out of their control, they may not be available. Access roads could be blocked, their office could be heavily damaged or some other problem might exist. For this reason, you need to have alternate contractors available. The Contractor Availability Form includes tabs for alternate contractors.

[For examples of a Contractor Availability Form and detailed instruction on how to use it, please see page 36 of the **Emergency Preparedness For Facilities** book.](#)

Inventory of Materials

Recovery from a storm occurs quicker if you have an inventory of equipment and tools to work with. Included in the inventory list should be an employee "survival" package. Necessary items include:

- Two pairs of sturdy shoes
- Multiple change of clothes
- Toiletries
- Sunblock & hat
- Essential medicines (especially prescription)

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- Replacement glasses or extra contact lenses
- Cell phone including extra batteries and car charger
- Portable radio with extra batteries
- Basic tools
- Automobile with fuel topped off
- Food and drink for three days (per person)
- Non-electric can opener

Water Purification

You can use bleach as a disinfectant (diluted 9 parts water to one part bleach), or in an emergency you can also use it to purify water. Use 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.

[For examples of an detailed Emergency Inventory list and detailed instruction on how to use it, please see page 120 of the *Emergency Preparedness For Facilities* book.](#)

First Aid Kit



Things you should have:

- Two pairs of Latex, or other sterile gloves (if you are allergic to Latex).
- Sterile dressings to stop bleeding.
- Cleansing agent/soap and antibiotic towelettes to disinfect.
- Antibiotic ointment to prevent infection.
- Burn ointment to prevent infection.
- Adhesive bandages in a variety of sizes.
- Eye wash solution to flush the eyes or as general decontaminant.
- Aspirin or nonaspirin pain reliever
- Anti-diarrhea medication
- Antacid (for upset stomach)
- Syrup of Ipecac (use to induce vomiting if advised by the Poison Control Center)
- Laxative

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If you live in a cold weather climate, you must think about warmth. It is possible that the power will be out and you will not have heat. Rethink your clothing and bedding supplies once a year to account for growing children and other changes.

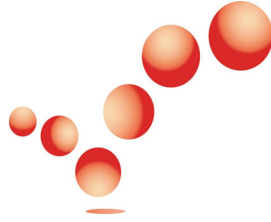
Have at least one complete change of warm clothing and shoes per person including:

- A jacket or coat
- Long pants
- A long sleeve shirt
- Sturdy shoes
- A hat and gloves
- A sleeping bag or warm blanket for each person.

The NOAA Weather Radio

Your greatest source of information prior, during and after any emergency event is the radio. After a major disaster, such as Hurricane Andrew in 1992, all stations on the radio drop their usual format and deliver helpful post disaster information. It is critical that you have a battery-powered radio to listen for storm warnings and advisories. Don't forget to supply extra batteries as you may be using the radio for quite some time after the storm has passed. Don't make the mistake of depending on electricity to power your radio; electricity may not be available.

The National Weather Service (NWS) broadcasts weather advisories and updates as received from NOAA. These broadcasts are available on a NOAA weather radio, 24 hours a day. These broadcasts are not limited to hurricanes. They cover both natural events and non-natural events such as chemical spills and biological threats. NOAA weather radio has been created as an "all hazards" radio network, available to national, state and local emergency management agencies. It is without doubt, the most comprehensive emergency information source available to the general public.



Carlyle Consulting Group

The Carlyle Consulting Group is a consulting firm specializing in the corporate and commercial real estate arena. The consulting service and training workshops focus on easy to implement and common sense solutions to today's complex business problems including OSHA compliance and emergency action planning, training and development. For a complete listing of services provided, visit the Carlyle Consulting Groups website.

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Emergency Preparedness For Facilities – A Guide to Safety Planning and Business Continuity”

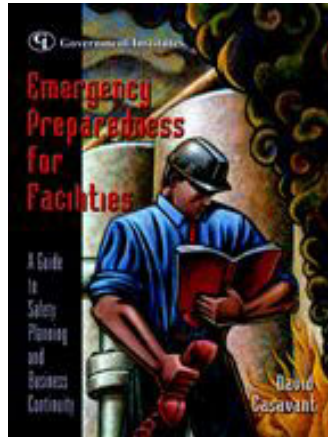


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