

PROTECTIVE ACTIONS FOR LIFE SAFETY

*Evacuation, lockdown, shelter-in-place,
and “run, hide, fight.”*

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There are many goals for a preparedness program—property protection, business resiliency, environmental protection, and protection of an organization’s brand, image and reputation. The first goal should always be the protection of life safety.

There are many hazards that could jeopardize life safety. Fires, severe weather, a spill or release of hazardous chemicals, or an act of violence or terrorism are just a few. Development of a preparedness program should begin with a risk assessment to identify foreseeable hazards; their probabilities of occurrence; and vulnerabilities in the site, buildings, warning and communications systems, fire protection and life safety systems, and physical and operational security that would expose people, property, business operations, and the organization to greatest risk. Read our [Preparedness Bulletin](#) on how to conduct a risk assessment.



The emergency operations plan should include actions to protect life safety from foreseeable hazards identified during the risk assessment. Protective actions include:

- **EVACUATION** (“run”) when there is a hazard inside the building and you must move to a safe location. In high-rise buildings and some health care facilities, occupants may be instructed to remain in place (“*defend in place*”) or move to an area of refuge within the building.

- **LOCKDOWN** (“hide”) when there is an armed perpetrator in the building or believed to be inside, but you don’t have a safe path to escape. This option is often referred to as “Shelter-in-Place.”
- **COUNTER** (“fight”) when confronted with an armed perpetrator and you must take action to protect your safety or the safety of others.
- **SHELTER-IN-PLACE (SIP)** when there is an exterior hazard such as a tornado, severe thunderstorm, or airborne hazard such as chemicals released from a transportation accident. There are variations in SIP depending on the type of the threat or hazard.

Evacuation

If there is a fire, hazardous chemical spill, or bomb within a building, then prompt evacuation to a safe location outside the building is the best protective action. Evacuation planning and “fire drills” have been required by fire prevention codes for many decades. Occupational Safety and Health Administration (OSHA) standards for employee safety in the workplace also require emergency action plans that include evacuation. An evacuation plan should address the following:

- Evacuation team
- Warning system (fire alarm or mass notification system)
- Adequate means of egress (exit routes) with safe assembly areas
- Means to account for all evacuees

Organize an evacuation team with a leader, floor wardens, searchers, stairwell monitors, and assembly area supervisors. Small facilities with a limited number of occupants will require

a minimal team. However, a large facility with hundreds or thousands of occupants such as a high-rise building will require a larger team.

Make sure the warning system is audible throughout the building and over ambient noise. Familiarize occupants with the sounds of alerting and evacuation signals, so they know when to evacuate or when to remain alert for further messages.

Verify that verbal messages are intelligible—clear and can be understood. Poor quality speakers, improper use of the system, and hard surfaces that echo sounds may contribute to messages that can't be understood. Communicate in multiple languages if necessary to ensure messages can be understood by all persons in the building during normal business hours and after-business hours when cleaning staff are working.

Walk all buildings and verify that there is the required minimum number of exits, travel distance is not excessive, exits are properly marked with visible signs, and there are no obstructions or impediments to egress—especially stairwells and landings that often are used for storage. Identify safe assembly areas away from the building. Assign a separate assembly area for each floor, area, or department and post signs so everyone knows where to assemble for accountability. Buildings within the inner city should take into account scenarios where the closest assembly area may not be accessible—identify alternate assembly areas farther away from the building.

Identify individuals with temporary or permanent disabilities (mobility, sight, hearing, or cognitive impairment) that will need assistance evacuating. Identify areas of refuge where evacuees needing extra assistance can be protected while awaiting rescue. Consider providing evacuation assist devices and training staff to evacuate persons with mobility impairments.

Manufacturing or other facilities where personnel must delay evacuation until they can safely shutdown process systems require special planning and precautions.

Procedures should include a process to account for all persons known to be within a building—including visitors. Up to date employee and visitor lists must be kept with a “go bag” or at a constantly attended location and removed when

the evacuation signal sounds. A headcount of persons should be taken at the assembly areas. Electronic mass notification systems may also be used to account for persons.

“Run, Hide, Fight”

If an armed perpetrator is inside a building threatening or actively using a weapon to harm people, occupants must be aware of multiple options:

- **“RUN”** out of the building to a safe location away from the building.
- **“HIDE”** from the perpetrator(s); also known as “lockdown”.
- **“FIGHT”** or counter the perpetrator.

“Run” or Evacuate

If there is a safe path to exit away from an armed perpetrator, running is the best option. Individuals will have to assess whether the path between the location of the perpetrator(s) and the exit is clear. If there is no place to hide or lockdown from the perpetrator, then running may be the only good option.

When escaping a perpetrator, choose the best escape path using secondary exits, passageways through adjacent rooms, and windows. When running away from the building, seek a solid barrier and run in an evasive zig-zag path if under fire. As you approach police keep hands up and relay any information about the perpetrator.

Evacuees should assemble at a safe location away from the building and not their assigned evacuation assembly point. Accountability of evacuees must be implemented.

“Hide” or Lockdown

Hiding from a perpetrator is a protective action often referred to as “lockdown.” Unlike evacuation, it is not safe for a team to direct the movement of building occupants to safety when an armed perpetrator is roaming the building. Rather, every person must be able to hear a lockdown warning and take cover immediately.

A public address system that can broadcast a lockdown warning throughout all buildings is essential. The system should be audible and intelligible throughout the building. Multiple persons should be able to broadcast a warning from mul-

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multiple locations in the building as soon as a threat is detected. Keep in mind that the security desk located adjacent to the front door may be the first target of the perpetrator.

Everyone within the building should know exactly what to do when lockdown is broadcast. If the location and direction of travel of the perpetrator is known, then individuals should “run.” If running is not a viable option then the goal is for everyone to become silent and invisible—hidden behind closed and locked or barricaded doors with the lights off.

Use any phone silently and without allowing a lighted screen to disclose your location. Communicate the location of any injured and the description, location, direction of travel, and weapons carried by the perpetrator(s).

Everyone should be prepared to remain in lockdown for an extended period until police enter or a recognized voice sounds the “all clear.” Procedures should also address what to do when the fire alarm sounds, which can be activated by the perpetrator or when smoke detectors sense the discharge of a firearm.

“Fight” or Counter

If unable to run and confronted by an armed perpetrator intent on harm, the remaining option is to fight back. Hit the attacker with whatever is available—throw books, scissors, backpacks, laptops, chairs, and other things. If in numbers, rush the attacker. Attack the perpetrator’s eyes and push the barrel of the firearm away. When the attacker is disabled, run.

Shelter-In-Place

Historically, shelter-in-place (SIP) has been the term used to describe the protective action employed when there is an exterior airborne hazard. A release of a hazardous chemical from a manufacturing or chemical plant, a transportation accident involving a chemical tank car, or a fire involving hazardous materials are the most likely scenarios requiring SIP. However, a terrorist incident involving an airborne hazard may also require SIP.

The SIP plan should identify the procedures for closing all outside air intakes and shutting down air handling systems. This can be accom-

plished in many modern buildings by computer controlled building management systems. However, it may be a more time consuming process in older buildings requiring staff to shutdown individual air handling units.

All exterior doors and windows should be closed. Building occupants should be relocated to the interior of the building away from exterior windows. Sheltering on floors above the ground floor is preferred because chemicals are heavier than air and tend to collect at grade level.

Shelter-In-Place from an airborne hazard is a temporary protective action since no building can be completely sealed to prevent the infiltration of chemicals. As prevailing winds carry a plume of chemicals over a building, some of the chemical may enter the building. As soon as the plume passes and emergency agencies sound the “all clear,” the building should be evacuated and air handling system restarted and placed in exhaust mode to purge the building of any chemicals.



Sheltering from Severe Weather

There are other scenarios that require sheltering within a building. Buildings located in areas subject to tornadoes should be equipped with tornado shelters that have been structurally reinforced. If hardened tornado shelters are not available, then buildings should be surveyed to determine the safest available spaces to shelter people.

Smartphone apps and Emergency Alert System (EAS) radio receivers should be deployed to receive immediate warning of severe thunderstorms, tornadoes, hazardous materials emergencies, acts of terrorism, and other emergencies. These apps and receivers can provide the maximum amount of time to warn and move people to shelter.

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Similar to evacuation, a team should be organized to direct, and a signal or means should be available, to warn occupants to move to shelter.

Training, Drills & Exercises

Protective actions require everyone to take immediate action. Everyone must know what to do as soon as the warning signal is heard. The training program should comply with applicable fire prevention, life safety, OSHA, and homeland security regulations. Links to codes, standards, and regulations can be found on preparednessllc.com.

Everyone should be familiar with the sound of the fire alarm system, emergency voice communication system, or mass notification system used for warning purposes. Everyone should know the primary and secondary paths to an exit and their primary and secondary assembly areas. Persons assigned to assist individuals with disabilities should be trained to use any evacuation assist devices.

Everyone should know their options to “run, hide, and fight” if there is an armed perpetrator. Employees should assess their areas so they will know where and how to take cover if a “lockdown” warning is broadcast and where to go if there is an order to “shelter in place” or shelter from a severe weather.

Adults learn by doing, so drills are an important learning tool. Evacuation drills are also required by many regulations. Design evacuation

drills to challenge people to find a secondary exit, to test electronic notification systems, and to practice accounting for the safety of all evacuees. Use drills to practice broadcasting warning instructions and to evaluate the audibility and intelligibility of the warning signal and announcements. Practice using radio and other communications systems and equipment during drills to hone skills and identify any limitations of personnel or equipment.

Lockdown drills require only a limited amount of time and can be done in any weather. Shelter-in-place drills will teach everyone where to go to shelter within the building.

Engage public emergency services as much as possible. Drills are an excellent opportunity to work together. The presence of fire and law enforcement personnel adds realism to drills and helps impress the importance of drills.

Prepare an evaluation form and assign sufficient evaluators to identify opportunities to enhance capabilities and performance. Keep records of all drills—especially drills required by regulations—and review the records as part of your overall preparedness program review process.

Drills should be a part of an overall exercise program that evaluates your preparedness program and familiarizes team members with their roles and responsibilities.

About Preparedness, LLC

Preparedness, LLC is a client-focused risk consulting company. Our mission is to safeguard people, protect property, minimize business interruption, and protect an entity’s image and reputation. Our vision is to thoroughly understand each client’s business and become a long-term, trusted advisor.

If you have questions, or need assistance with the development, implementation, or evaluation of your preparedness program, please contact us.

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