FIRE DEPARTMENT • CITY OF NEW YORK



REMEDIAL FLSD_NON-FIRE COMPONENT R-59 STUDY GUIDE

This publication is provided free to the public by the New York City Fire Department.

Note:

This R-59 exam is only subject to candidates who

(1) currently hold one or more C of Fs for Fire and Life Safety Director (F-89) (T-89 C of F holder is NOT subject to R-59 exam)

AND

(2) who failed two or more important responses for the **Non-Fire Component** (EAPD) of the On-Site Exam **for certification at an additional work location.**

You have to take the R-59 exam if you receive the Notice of Failure requiring you to take this exam. However, you are NOT subject to the R-59 exam if you surrender all your F-89 cards to be inactive.

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Release 1.0 – This guide will be updated periodically. Please check the FDNY website to see if there is a newer version before your test date.

NOTICE OF EXAMINATION

TITLE: REMEDIAL FIRE AND LIFE SAFETY DIRECTOR

_NON-FIRE COMPONENT (R-59)

DATE OF TEST: Written exams are conducted Monday through Friday (except legal

holidays)

8:00 AM to 2:30 PM.

REQUIREMENTS FOR WRITTEN EXAM

Applicants who need to take the exam must apply in person and bring the following documents:

- 1. **Identification.** Applicant must provide two forms of identifications; at least one form of identification must be government issued photo identification, such as a Stateissued Drivers' License or Non Driver's License or a passport.
- 2. **Letter of Recommendation.** Applicants must present a letter of recommendation from his/her employer. The letter must be on official letterhead, and must state the applicant's full name, experience and the address where the applicant will work. If the applicants are self-employed or the principal of the company, they must submit a notarized letter attesting to their qualifications. For more info:
 - Sample of recommendation letter: http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-samplerec-letter.pdf
 - Sample of self-employed letter: http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-sample-selfrecletter.pdf
- 3. **A-20.** Applicants must present a completed application for certificate of fitness (A-20 Form).
 - http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-application-form.pdf
- 4. **Without Required Documentation.** Applicants not currently employed may take the exam without the required documentation. If the applicants pass the exam, FDNY will issue a temporary letter with picture for the job seeking purpose. The C of F card will not be issued unless the applicants are employed and provide all of the required documentation. (Exception: If COF has a school requirement, applicant will not be allowed to take COF exam until school is completed.)
- 5. **Special requirements for the:** R-59 exam:
 - (1) Applicants must bring ALL their current F-89 and submit them to FDNY with their A-20 application form.
 - (2) Applicants must bring the Notice of Failure from the Fire Department.

6. APPLICATION FEE:

Pay the \$25 application fee in person by one of the following methods:

- Cash
- Credit card (American Express, Discover, MasterCard, or Visa)
- Debit card (*MasterCard or Visa*)
- Personal or company check or money order (*made payable to the New York City Fire Department*)

A convenience fee of 2% will be applied to all credit card payments.

For fee waivers submit: (Only government employees who will use their C of F for their work-related responsibilities are eligible for fee waivers.)

- A letter requesting fee waiver on the Agency's official letterhead stating applicant full name, exam type and address of premises; AND
- Copy of identification card issued by the agency

7. EXAM INFORMATION

The **R-59** exam will consist of **20** multiple-choice questions, administered on a "touch screen" computer monitor. It is a time-limit exam. Based on the amount of the questions, you will have **30** minutes to complete the test. A passing score of at least 70% is required to demonstrate to the Department that you have the basic Fire Safety Knowledge for serving as a Fire and Life Safety Director.

Call (718) 999-1988 for additional information and forms.

Please always check for the latest revised booklet at FDNY website before you take the exam.

http://www1.nyc.gov/assets/fdny/downloads/pdf/business/cof-r59-noe-study-materials.pdf

If You Pass the R-59 Examination

If you pass the remedial examination within the time period allowed in the Notice of Failure, you may submit a request to re-take the FLSD on-site examination for the work location for which you desire certification.

If You Fail the R-59 Examination

If you fail the remedial examination, ALL CURRENT F-89 Certificate(s) of Fitness (at all locations) will be SUSPENDED. And you are NOT allowed to take ANY on-site exam unless you fulfill the following steps:

- 1. You have to complete the approved 31-hr FLSD courses;
- 2. You have to pass two FLSD computer-based exams, the Fire component (FSD) and the Non-Fire component (EAPD),

EXAM SITE: FDNY Headquarters, 9 MetroTech Center, Brooklyn, NY. Enter through the **Flatbush Avenue entrance (between Myrtle Avenue and Tech Place)**.



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1. INTRODUCTION

The R-59 booklet focuses on the topics listed below.

- FLS Director responsibilities in non-fire emergencies
- Four non-fire emergency actions (EAP actions) for different areas and emergency scenarios

These topics cover the primary knowledge of the FLS staff required duties during a fire incidence. This R-59 booklet is intended to introduce you to the topic areas that will be covered on the R-59 Examination. It is just a general overview of the topic areas and is not intended to be a comprehensive guide. In addition to reading this study guide, you should re-read the FLSD booklet in its entirety to obtain additional knowledge to pass this exam and the FLSD on-site exam. The FLSD booklet is available on the link below:

http://www1.nyc.gov/assets/fdny/downloads/pdf/business/fire-and-life-safety-director-FLSD-curriculum.pdf

The study guide does not contain all the information you need to know in order to work efficiently and safely while acting as a Fire and Life Safety Director. It is your responsibility to become familiar with all applicable laws, rules and regulations of the federal, state and city agencies having jurisdiction, even though such requirements are not included in this study guide. You need to be familiar with the National Fire Protection Association (NFPA) rule book and applicable sections of the New York City Fire Code in order to adequately prepare for this exam. You must also be able to understand and apply the rules and procedures contained in this study guide to help increase your chances of receiving a passing score.

2. FLS DIRECTOR RESPONSIBILITIES IN NON-FIRE EMERGENCIES

FLS Directors, have to assess the magnitude of the non-fire emergency in order to determine the best course of action. Communicate with the Brigade members to get information of conditions at different locations and their possible impact on the building. In certain situations, news outlets may also provide you a broader picture of the situation. Once he or she has sufficient information to dictate that the FDNY plan should be immediately implemented, he or she has to decide on which of the following actions shall take place: shelter in place, in-building relocation, partial evacuation or full evacuation, whenever such action is deemed necessary to ensure the safety of building occupants.

2.1 Required non-fire emergency actions

In the event of a non-fire emergency in or affecting the building, the following actions must be taken:

- The FLS Director should immediately report to the Fire Command Center. The Fire Command Center should be used for command, communication and control of the emergency.
- Immediately call 911 to report (1) any emergency situation and (2) any determination to implement the Plan and which non-fire emergency action (i.e. EAP action) is being implemented. These two details must be covered to receive full credit during the On Site exam. (Title 3 Rules of the City of New York 404-02-(c)-7)
- Notify/consult with the FLS Brigade regarding the implementation of the Fire Safety/Emergency Action Plan.

The FLS Director may decide to perform different actions based on the different events and emergency scenarios (refer to chapter 3 of this booklet). The most appropriate actions may also vary depending on the specific emergency situation occurring and the building design and components. The decision of sheltering in place, in-building relocation, partial evacuation or full evacuation shall be based on an analysis of circumstances (such as consultation with the FLS brigade members and information gathered from the building occupants, news outlets, etc.) in which such action would best ensure safety of building occupants, and the manner in which it could best be implemented in the building.

The proper non-fire emergency actions should also depend on the type of the emergency, and the location of the incidents. The FLS Director should also decide the affected area based on the understanding of the basic characteristics of the hazards such as speed of onset, scope and duration of impact, and potential for producing casualties and building damage.

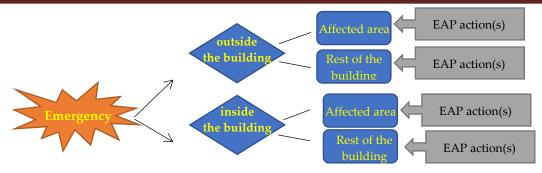
In general, the FLS Director should implement a non-fire emergency action (EAP action) or combination of actions that will keep the occupants away from the threat. FLS Director or FLS staff should strongly encourage the occupants to follow the FLS Director's order; however; they cannot **physically** force the building occupants to shelter in place, relocate in building or evacuate unless mandated by law enforcement or public health officials.

• The meaning of the **affected area** in this booklet is determined to be:

The area(s) that may be in close proximity to the threat/incident and experience the immediate impact of the threat/incident.

• The meaning of the **rest of the building** in this booklet is determined to be:

The area(s) other than the affected area



- Notify the building occupants of 4Ws:
 - a. What has occurred
 - b. Where it has occurred
 - c. What provisions of the plan will be implemented (Inform the occupants of the appropriate actions to follow)
 - d. Why they are being instructed to follow the non-fire emergency actions (EAP actions) (explain why the actions are necessary)

• Assess the Building Components or Systems and take appropriate actions

Egress from entrances/exits and stairways

The access/egress might be denied or limited based on different emergencies.

Elevator operation

Recall all elevators. Determine if it is safe to use elevators. If safe, only elevators provided with two-way voice communication are allowed to be used and must be operated in a manual/independent mode. (Exception: the active shooter incident should be referred to chapter 4 of this booklet).

Evaluate ventilation system operation

Take appropriate actions.

Windows

In some emergencies, windows may need to be placed in a closed position. The occupants may need to be moved away from shattering glass; however, in some emergencies, the windows may need to be opened (if possible) to increase the air flow.

➤ Interior door, including fire doors

Maintain doors in the closed and unlocked position. Manually release all fail-safe (electro-magnetic door release) devices (if applicable) to ensure all re-entry doors are unlocked (Exception: the active shooter incident should be referred to chapter 4 of this booklet).

- Evaluate electrical, natural gas, steam, and other utility operations
 All should be assessed. The shut-off valve should be indicated in the Plan of the building.
- Evaluate fuel oil storage systems and associated pumps and piping All should be assessed.

Communications

- Monitor the media via the television, radio, and internet for updates from local authorities (i.e. the Mayor's Office).
- ➤ Maintain appropriate communication with the building occupants. Prevent occupants from panic or self-evacuation.

• The "all clear" can only be given when it is announced by the authorities that the threat has passed.

Once the "all clear" is given, an appropriate announcement should be made to the building occupants by the authorities that the threat has passed.

2.2 Non-evacuation actions: shelter-in-place and in-building relocation

There may be situations when it's best to stay where you are to avoid any uncertainty outside. There are circumstances, such as an incident occurring outdoors or during a tornado when the occupants should stay indoor as a matter of survival. The FLS Director should understand the different threats and plan for all possibilities. Shelter-in-place and in-building relocation are protective actions taken inside the building, with doors and windows closed, to minimize occupants' chance of injury.

The FLS Director may decide to implement shelter-in-place or in-building relocation if the emergency is determined that:

- It is safer to remain inside the facility because of outside threats:
 - Severe weather (tornado, hail, etc.)
 - Civil disturbances close to the premises
 - Bomb threat outside building
 - presence of an outside airborne substance that has not yet been identified
 - Accidental chemical released outside
- Releasing a large number of employees onto the roads and public transportation will only add to the confusion and panic
- Exposure to some hazard or harm is likely, and releasing employees will spread the hazard to others, including family members.

2.2.1 Shelter in Place

Shelter in place: The precaution of directing building occupants to remain inside the building, at their present location, in response to a fire or an emergency. In other words, "shelter in place" means stay where you are. The decision is made because the FLS Director

determines that this action can best ensure safety of building occupants and be best implemented in the building.

2.2.2 <u>In-building relocation</u>

In-building relocation. The controlled movement of building occupants from an endangered area of a building to an in-building relocation area within the same building in response to a fire or an emergency.

In-building relocation area (IBRA): A designated area within a building to which building occupants may be relocated. Such areas shall be addressed in the Fire Safety/Emergency Action Plan. The areas are more sheltered than the normal work areas.

During certain emergencies, occupants will require actual physical protection from an external threat. In such cases, occupants will be directed to a pre-designated, relocation area that provides appropriate protection against the perceived threat or danger.

The decision of in-building relocation shall be based on an analysis of the circumstances in which such action would best ensure the safety of building occupants, and the manner in which it could best be implemented in the building.

Specific requirements in the Comprehensive Fire Safety and Emergency Action Plan for In-Building Relocations

The Comprehensive Fire Safety and Emergency Action Plan must provide a statement and explanation of the specific procedures for every emergency that will be implemented.

The plan must provide the following information:

- (1) Designated in-building relocation areas (IBRA).
 - Type and location of areas (such as elevator lobby, interior office, conference room, and mechanical room, etc.) must be listed in the plan.
- (2) Designated routes by which building occupants would be directed to in-building relocation areas.
 - If building occupants will be directed to IBRA's on a floor other than the floor of their normal work location, complete routes to such IBRA's shall be designated. If the building occupants on a single floor will be directed to IBRA's on more than one floor

- specify how such areas will be assigned, such as by employer, room numbers or portions of the floor area.
- (3) Procedures for accounting for building occupants after completing in-building relocation.

A statement which provides the specific methods to be used to account for persons in the IBRA after an in-building relocation is implemented, who will communicate such information back to the Fire Command Center, and how it will be communicated must be included in Fire Safety/ Emergency Action Plan.

The FLS Director should know who are in the building and where they are if an emergency develops.

(4) Procedures for identifying building occupants who require assistance, and the procedures for providing such assistance.

Include in statement that a list of such occupants shall be prepared and maintained at the Fire Command Center. Also state in this plan that person(s) will be designated to assist such occupants, the elevator(s) designated for use in their movement, and specific personnel designated to operate such elevator(s). Person designated to operate the elevator(s) shall also be identified in the plan.

Additionally, an alternative procedure for movement of such building occupants in the event that designated elevators are inoperable or unsafe for use shall be provided.

2.3 Evacuation actions: partial evacuation and evacuation

The decision on whether to evacuate the building, either completely or certain portions, will involve the consideration of several factors. Deciding whether and how to evacuate depends on the type of threat, the circumstances of the threat, and where the danger is or is suspected to be.

Partial evacuation. The emptying of a building of some but not all building occupants in response to an emergency.

Evacuation (Full evacuation). The emptying of a building of all building occupants in response to an emergency.

Evacuation of an entire building or a particular area may not always be necessary, especially if the incident may only affect a specific area and pose no threat to other parts of the building. The most general consideration is whether there was an event that already compromised the integrity of the building systems and the safety of its occupants or if there is the potential for one to occur. The difference between considering an evacuation as opposed to an in-building relocation would be the impact of the emergency to the building. An evacuation is necessary to remove people from a specific area of danger within the building or from the entire building. In many cases, partial evacuation may be sufficient. Partial evacuation provides for immediate, general evacuation of the areas of the building nearest the incident. A partial evacuation may be appropriate when the building features assure that occupants away from the evacuation zone will be protected from the effects of the incident for a reasonable time. If an incident expands and threatens occupants in other parts of the building, further partial or full evacuation may be required.

The Comprehensive Fire Safety and Emergency Action Plan must provide a statement and explanation of the specific procedures for every emergency that will be implemented when a partial evacuation or a full evacuation is implemented. The plan must provide the following information:

- (1) Location of exits, stairways and elevators.
 - Identify the location of exits, stairways, and (if to be utilized) elevators, and their capacity.
- (2) Primary and alternate exit routes.
 - Identify the primary designated exit routes for the evacuation of each floor or other area of the building and alternative exit routes in the event that the primary designated routes cannot be used.
- (3) Assembly areas.
 - Identify the assembly areas.
- (4) Procedures for accounting for building occupants after completing a partial evacuation.
 - Provide the specific methods to be used to account for persons in the assembly areas after a partial evacuation or a full evacuation is implemented, and who and how such information will be communicated back to the Fire Command Center.

The FLS Director should know who are in the building and where they are if an emergency develops.

(5) Procedures for identifying building occupants who require assistance, and the procedures for providing such assistance.

Include in statement that a list of such occupants shall be prepared and maintained at the Fire Command Center. Also state in this plan that person(s) will be designated to assist such occupants, the elevator(s) designated for use in their movement, and specific personnel designated to operate such elevator(s). Person designated to operate the elevator(s) shall also be identified in the plan.

Additionally, an alternative procedure for movement of such building occupants in the event that designated elevators are inoperable or unsafe for use shall be provided.

2.4 Building ventilation options

The building engineer is expected to assist the FLS Director with building ventilation systems. The FLS Director should consult the engineer in regards to the **Heating Ventilation** and **Air Conditioning** (HVAC) and **Smoke Control System**. Shutting down the HVAC in the entire building or parts of the building is usually the standard action during a fire/smoke condition. However, the response may be different during chemical, biological, and radiological (CBR) emergencies. Different issues should be considered under different circumstances.

According to the NYC Building Code, all building occupant spaces must be ventilated by either natural or mechanical means. Ventilation in high-rise buildings is best accomplished via the HVAC system. In most HVAC systems, a portion of ventilation air is supplied to occupied spaces is outdoor air and a portion is re-circulated air. The HVAC systems can become an entry point and a distribution system for hazardous chemical, biological, or radiological contaminates.

Preventing terrorist access to a targeted facility requires physical security of entry, storage, roof, and mechanical areas, as well as securing access to the outdoor air intakes of the building's HVAC system.

One of the most important steps in protecting a building's indoor environment is the security of the outdoor air intakes. Outdoor air enters the building through these intakes and is distributed throughout the building by the HVAC system. Introducing CBR agents into the

outdoor air intakes may allow a terrorist to use the HVAC system as a means of dispersing the agent throughout a building. Publicly accessible outdoor air intakes located at or below ground level are at most risk—due partly to their accessibility (which also makes visual or audible identification easier) and partly because most CBR agent releases near a building will be close to the ground and may remain there. Securing the outdoor air intakes is a critical line of defense in limiting an external CBR attack on a building.

Real life event:

On 02/12/2017, Firefighters and ambulances were rushed to Hamburg Airport in German after about 50 people at one terminal complained of eye irritation and breathing difficulties. German officials evacuated hundreds of people and briefly closed the facility. Authorities said it was probably pepper spray disseminated through the airconditioning system.

Physically securing the outdoor air intakes or providing perimeter barriers, making the intakes inaccessible to the public, is a preferred way to protect the intakes.

Many central HVAC systems have energy management and control systems that can regulate airflow and pressures within a building on an emergency response basis. Some modern fire alarm systems may also provide useful capabilities during CBR events. In some cases, the best response option (given sufficient warning) might be to shut off the building's HVAC and exhaust system(s), thus, avoiding the introduction of a CBR agent from the outside. In other cases, interior pressure and airflow control may prevent the spread of a CBR agent released in the building and/or ensure the safety of egress pathways. The decision about the emergency HVAC control options should be made in consultation with a qualified HVAC professional (e.g. Building chief engineer) who understands the ramifications of various HVAC operating modes on building operation and safety systems.

2.5 Actions and building ventilation issues during CBR threats

FEMA developed a manual, FEMA 426: Reference Manual to Mitigate Potential Terrorist Attacks, to provide guidance to the building staff how to safeguard the occupants of a building from CBR threats.

The manual indicates that after the presence of an airborne hazard is detected, there are possible protective actions for a building and its occupants. In increasing order of complexity and cost, these actions are:

- 1. Evacuation
- 2. Sheltering in Place or in-building relocation
- 3. Air Filtration and Pressurization
- 4. Exhausting and Purging

These actions are implemented, singly or in combination, when a hazard is present or known to be imminent. To ensure these actions will be effective, a protective action plan specific to each building, as well as training and familiarization for occupants, is required.

2.5.1 Evacuation

Evacuation is the most common protective action taken when an airborne hazard, such as smoke or an unusual odor, is **perceived in a building**. In most cases, existing plans for fire evacuation apply. Orderly evacuation is the simplest and most reliable action for an internal airborne hazard. However, it may not be the best action in all situations, especially in the case of an external CBR release or plume, particularly one that is widespread. If the area covered by the plume is too large to rapidly and safely exit, sheltering in place should be considered. If a CBR agent has infiltrated the building and evacuation is deemed not to be safe, the use of protective hoods may be appropriate.

Two considerations in non-fire evacuation are:

- 1) to determine if the source of the airborne hazard is internal or external, and
- 2) to determine if evacuation may lead to other risks.

Also, evacuation and assembly of occupants should be on the upwind side of the building and at least 100 feet away, because any airborne hazard escaping the building can be carried downwind.

2.5.2 Sheltering in place or in-building relocation

Sheltering in place or in-building relocation may protect building occupants from airborne hazards **outside the building**. To maximize the protection, the following two distinct actions are required without delay:

- (1) Reduce the indoor-outdoor air exchange rate **before** the hazardous plume arrives. This can be achieved by closing all windows and doors and turning off all fans, air conditioners, and combustion heaters.
- (2) <u>Increase the indoor-outdoor air exchange rate as soon as the hazardous plume **has**</u> **passed**. This can be achieved by opening all windows and doors and turning on all fans to ventilate the building.

The tighter the building (i.e., the lower the air exchange rate), the greater the protection it provides. In most cases, air conditioners and combustion heaters cannot be operated while sheltering in place because operating them increases the indoor-outdoor exchange of air.

Protection will decrease as the time of exposure increases. Sheltering in place or in-building relocation is, therefore, suitable only for exposures of short duration, roughly 2 hours or less, depending on conditions.

Important considerations for use of sheltering in place or in-building relocation are that stairways must be isolated by closed fire doors, elevators must not be used, and clear evacuation routes must remain open if evacuation is required.

2.5.3 Air filtration and pressurization

Among the various protective measures for buildings, high efficiency air filtration/cleaning provides the highest level of protection against an outdoor release of hazardous materials. It can also provide continuous protection, unlike other approaches for which protective measures are initiated upon detecting an airborne hazard.

2.5.4 Exhausting and purging

The Fire Department personnel may turn on building ventilation fans and smoke-purge fans as a protective action to purge airborne hazards and reduce occupant exposure.

2.5.5 Plan and training

Individuals developing emergency plans and procedures should recognize that there are fundamental differences between chemical, biological, and radiological agents. In general, chemical agents will show a rapid onset of symptoms, while the response to biological and radiological agents will be delayed. If an HVAC control plan is pursued, building personnel should be trained to recognize a terrorist attack quickly and to know when to initiate the control measures. For example, emergency egress stairways should remain pressurized (unless they are known to contain the CBR source). Other areas, such as laboratories, clean rooms, or pressure isolation rooms in hospitals, may need to remain ventilated. All procedures and training associated with the control of the HVAC system should be addressed in the building's emergency response plan.

2.6 Use of elevator

The Comprehensive Fire Safety and Emergency Action Plans MUST specify whether and how elevators and other building systems will be used to implement such plan. Elevators may be used to implement the plan during non-fire emergencies, subject to the following considerations:

- (A) Floors or building occupants to be evacuated or relocated by elevators shall be designated in the Comprehensive Fire Safety and Emergency Action Plan.
- (B) Elevators that are to be used for evacuation, partial evacuation, shelter in place or inbuilding relocation must be provided with **two-way voice communication** to the Fire Command Center in accordance with the Building Code requirements.
- (C) Elevator use must be directed only when the FLS Director or deputy FLS Director has assessed the situation and determined that such use would be safe.
- (D) Only designated elevators must be used and only those elevators so designated shall remain in service. All other elevators must be recalled to the lobby or their lowest floor of travel.
- (E) Movement of elevators must be controlled either by operation in manual mode by an FLS staff member or at the elevator control panel in the lobby, under the direct supervision of the FLS Director.
- (F) Building occupants must board elevators only on designated floors and disembark elevators at floors as directed by the FLS Director.

2.7 Building occupants with special needs

The FDNY plan must establish procedures for identifying and providing assistance to building occupants with special needs. It may include implementing procedures or modifying equipment to ensure

- receipt of announcements,
- areas for assistance are designated,
- persons to provide assistance are designated.

The owner must make the procedure for such assistance known to all employers and building occupants.

A list of the building occupants who have requested such assistance and their work location must be maintained at the Fire Command Center, and made available to FDNY representatives or emergency response personnel, upon request.

The FLS Director, FLS wardens and, as appropriate, other FLS staff, shall periodically review the list of such building occupants on the floors or other areas of the building in which they perform their duties, so as to familiarize themselves with the building occupants requiring assistance to participate in the FDNY plan.

2.8 Situational awareness in the context of non-fire emergencies

(This section is cited from the following resources:

- 1. Aware, Alert, Aggressive, Always: How to Do Your Job Effectively When Things Are Trying to Kill you. Capt. Rommie L. Duckworth at Ridgefield Fire Department, presented at the Wisconsin EMS Association Working Together conference, 2017. https://www.slideshare.net/romduck/situational-awareness-for-fire-and-ems
- Situational awareness: Key to Emergency Response, Chief Scott Reichenbach with the New Cumberland Federal Fire Department in Pennsylvania, 2009. http://www.fireengineering.com/articles/print/volume-162/issue-3/features/situational-awareness-key-to-emergency-response.html

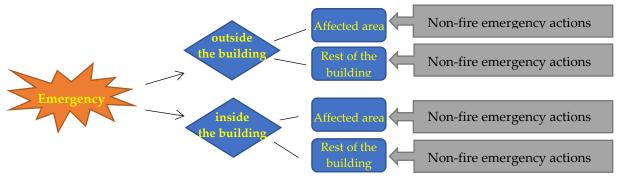
Situational awareness is defined as knowing what is going on and figuring out what to do. Situational awareness involves perceiving, processing, and predicting. Situational awareness follows six critical steps. The first step is to perceive by seeking and scanning for critical clues and cues. The second step is to process a mental model from the critical clues and cues gathered during the seek and scan. The third step is to predict what will happen next if responders don't intervene. The prediction is based on the mental model formed in the previous step. Use the prediction to decide in the fourth step and then in step five take action. The final step in Duckworth's situational awareness process is to communicate and coordinate.

When situational awareness decreases, the potential for human error will increase. Effective communication is one of the most important factors in maintaining situational awareness. An FLS Director should be aware of what actions will be performed by other FLS staff, so he or she can coordinate the operations efficiently. An FLS Director should assess and reassess the incident's progress in relation to determine if the FLS staff is on track to safely and effectively accomplish the mission goals.

Situational awareness is dynamic and complex. It is not easy to know what is going on all the time, especially during large-scale or high-stress incidents. Therefore, it is important that you know how to seek and identify the critical clues and information to keep yourself situationally aware.

3. FOUR NON-FIRE EMERGENCY ACTIONS (EAP ACTIONS) FOR DIFFERENT AREAS AND EMERGENCY SCENARIOS

This section is meant as a commentary to support & further clarify the tables enclosed (table 3-A1, 3-A2, 3-B1, 3-B2, 3-C1 and 3-C2). This section is broken down into different types of emergencies. Each emergency is then split into two areas: inside the building & outside the building. The actions discussed will follow along as seen below:



- The meaning of the **affected area** in this booklet is determined to be:
 - The area(s) that may be in close proximity to the threat/incident and experience the immediate impact of the threat/incident.
- The meaning of the **rest of the building** in this booklet is determined to be:

The area(s) other than the affected area

The FDNY has created three categories of response actions: they are "**RECOMMENDED**" (refer to table 3-A1 & table 3-A2), "**ACCEPTABLE**" (refer to table 3-B1 & table 3-B2) and "**UNACCEPTABLE**" (table 3-C1 & 3-C2).

The following content is arranged as follows:

- The type of the emergency
 - o **Outside** Action to be taken for:
 - ightharpoonup Affected Area -Recommended \rightarrow Acceptable \rightarrow Unacceptable
 - \triangleright Rest of the Building -Recommended \rightarrow Acceptable \rightarrow Unacceptable
 - o Inside Action to be taken for:
 - ➤ <u>Affected Area</u> -Recommended → Acceptable → Unacceptable
 - ightharpoonup Rest of the Building -Recommended \rightarrow Acceptable \rightarrow Unacceptable

This section offers, as a general guide, the following non-fire emergency (EAP) actions steps, as used in table 3-A1, 3-A2, 3-B1, 3-B2, 3-C1 and 3-C2. They will be used as a scoring criterion for the FLSD on-site test:

- The **recommended** non-fire emergency (EAP) actions (listed in the table 3-A1 & table 3-A2) the actions that the FDNY strongly recommends the applicants should apply for the specific scenarios. The applicants **will receive full credit** if they choose the action(s) in the On-Site exam.
- The acceptable non-fire emergency (EAP) actions (listed in the table 3-B1 & table 3-B2)
 the actions that the FDNY does not recommend. The applicants will receive partial credit in the On-Site exam.

• The **unacceptable** non-fire emergency (EAP) actions (listed in the table 3-C1 & table 3-C2) - the actions that the FDNY does not encourage the applicants to apply for the specific scenarios. The applicants **will NOT receive credit** in the On-Site exam.

The study material is **NOT** a mandate regarding non-fire emergency (EAP) actions; it is only providing a rule of thumb for general emergency situations. **The most appropriate non-fire emergency actions may vary depending on the specific emergency situation which occurs within the context of the building design and components.**

3.1 Emergency actions for biological incident or release

If there is any suspicious letter or package that may contain a biological agent, such as "anthrax", the envelope or package should be isolated. All occupants should be removed and situated into a safe area. The first responders will perform a threat assessment of the situation and make decisions about further actions.

3.1.1 Biological agent released outside the building impacting the immediate area

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
 - (1) Recommended actions for the affected area: in-building relocation.
 - Reason:

If a credible biological threat has occurred outside the building (e.g. outside the building main entrance), the openings of the building or the place near the main entrance (e.g. the lobby) have a high probability of being exposed to the threat and should be treated as affected areas.

The occupants may be exposed to the threat. The FDNY recommends relocating the occupants to a safe in-building relocation area.

- (2) Recommended actions for the rest of the building: shelter in place.
- Reason:

Since the rest of the building is not affected by the incident, the FLS Director should instruct the occupants to remain where they are.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: in-building relocation.

> Reason:

There is no urgent need to move the occupants who are not affected by the incident; however, the FDNY accepts (but does not recommend) if the FLS Director makes the choice to move the occupants to safe in-building relocation areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

Evacuating the occupants and exposing them to the outside biological/toxic agent will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

Evacuating the occupants and exposing them to the outside biological/toxic agent will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

II. Other special notes:

The affected area should be isolated. All building entrances (including loading dock, garage door, etc.) should be closed and sealed off to prevent any contamination from

entering the building. It may also be advisable to post a guard at every entrance to limit both access and egress from the building.

3.1.2 Biological agent released inside the building (in a confined area only)

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
 - (1) Recommended actions for the affected area: isolate the individual(s) who was/were directly exposed to the agent.

Reason:

The individual(s) who has/have been exposed to or have had contact with the possible biological agents must be isolated. The individual(s) should be isolated in an area free from any further exposure and away from other people who have not been exposed to the agent and be hold for possible decontamination. By isolating both the affected area and individual(s), the FLS director helps to limit the spread of the biological agents and allow the individual(s) to receive medical evaluation and treatment as soon as possible.

(2) Recommended actions for the rest of the building: shelter in place or in-building relocation.

Reason:

The decision made to implement a shelter in place or an in-building relocation is recommended by the FDNY. The occupants in the rest of the building are not experiencing the threat directly. There is no need to evacuate the occupants; however, the occupants should be alerted to stay away from the threat.

- b. Acceptable actions: (refer to table 3-B1)
- (1) Acceptable actions for the affected area: NA.

(2) <u>Acceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

There is no urgent need to move the occupants outside; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to evacuate the occupants to a safe, well-ventilated outside assembly area(s).

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: not isolate the individual(s) who has/have had direct contact with the agent.

Reason:

The individual(s) who has/have had direct contact with the agent should be removed away from the threat but not be released to prevent possible cross-contamination.

(2) <u>Unacceptable actions for the rest of the building:</u>

Reason:

If the FLS Director chooses to move the occupants, it will not be acceptable to the FDNY if he/she decides that the exit route for the occupants is passage through the affected area. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

II. Other special notes:

The affected area should be isolated. Advise everyone to stay clear of the affected area.

3.1.3 <u>Biological agent released inside the building, and possibly contaminates</u> multiple floors (e.g. someone carried the agent to multiple floors)

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)

(1) Recommended actions for the affected area: isolate the individual(s) who was /were directly exposed to the agent.

> Reason:

The individual(s) who has/have been exposed to or have had contact with the possible biological agents must be isolated. The individual(s) should be isolated in an area free from any further exposure and away from other people who have not been exposed to the agent and be held for possible decontamination. By isolating both the affected area and individual(s), the FLS Director helps to limit the spread of the biological agents and allow the individual(s) to receive medical evaluation and treatment as soon as possible.

(2) Recommended actions for the rest of the building: shelter in place.

Reason:

Before the emergency personnel arrive, the decision made to implement a shelter in place is recommended by the FDNY. Because the agent has been carried around on multiple floors, it might contaminate undetermined locations. The FLS Director should recommend that all individuals who have not been directly exposed to the agent to stay in place to wait for further instructions given from the emergency personnel. It could prevent the occupants from exposure to the agent.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: in-building relocation, partial or full evacuation (evacuation P/F).

Reason:

There is no urgent need to move the occupants; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to designated safe in-building relocation areas or to safe, well-ventilated outside assembly areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: not isolate the individual(s) who has /have had direct contact with the agent.

> Reason:

The individual(s) who has/have had direct contact with the agent should be removed away from the threat, but not be released to prevent possible cross-contamination.

(2) <u>Unacceptable actions for the rest of the building:</u>

Reason:

If the FLS Director chooses to move the occupants, it will not be acceptable to the FDNY if he/she decides that the exit route for the occupants is passage through the affected area. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

II. Other special notes:

The affected area should be isolated. Advise everyone to stay clear of the affected area.

3.2 Emergency actions for chemical incident or release

3.2.1 Chemical agent released outside the building impacting the immediate area

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
- (1) Recommended actions for the affected area: in-building relocation.

> Reason:

If a credible chemical threat has occurred outside the building (e.g. outside the building main entrance), the openings of the building or the place near the main entrance (e.g. the lobby) which have higher risk for being exposed to the threat should be treated as affected areas.

The occupants may be exposed to the threat. The FDNY recommends relocating the occupants to a safe in-building relocation area.

(2) Recommended actions for the rest of the building: shelter in place.

> Reason:

Since the rest of the building is not affected by the incident, the FLS Director should instruct the occupants to remain where they are.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: in-building relocation.

> Reason:

There is no urgent need to move the occupants who are not affected by the incident; however, the FDNY accepts (but does not recommend) if the FLS Director makes the choice to move the occupants to safe in-building relocation areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

> Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

Reason:

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

II. Other special notes:

The affected area should be isolated. All building entrances (including loading dock, garage door, etc.) should be closed and sealed off to prevent any contamination from entering the building. It may also be advisable to post a guard at every entrance to limit both access and egress from the building.

3.2.2 Chemical agent released inside the building

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
 - (1) Recommended actions for the affected area: in-building relocation, partial or full evacuation (evacuation P/F).

> Reason:

The individual(s) who has/have been exposed to or have had contact with the possible chemical agents should be removed from the affected area (in-building relocation, partial or full evacuation). The individual(s) should be relocated to an area free from any further exposure and away from other people who have not been exposed to the agent and be held for possible decontamination. By isolating both the affected area and individual(s), the FLS Director helps to limit the spread of the chemical agents and allow the individual(s) to receive medical evaluation and treatment as soon as possible.

Decontamination includes changing of clothes and placing the contaminated clothes in a sealed plastic bag, if applicable. Washing with soap (preferably liquid) and water. Flushing skin with lots of water; flushing eyes with water if they are irritated.

In general, the FLS Director should take action to find clean air quickly: evacuate or inbuilding relocate the occupants.

(2) Recommended actions for the rest of the building: shelter in place.

Reason:

The decision made to implement a shelter in place is recommended by the FDNY. Because there is no urgent need to move the occupants, the FLS Director should recommend the occupants stay in place.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: in-building relocation, partial or full evacuation (evacuation P/F).

Reason:

There is no urgent need to move the occupants; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to designated safe in-building relocation areas or to safe, well-ventilated outside assembly areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place.

Reason:

Sheltering the occupants in place in the affected area will serve to increase their contact with the threat.

(2) <u>Unacceptable actions for the rest of the building:</u>

Reason:

If the FLS Director chooses to move the occupants, it will not be acceptable to the FDNY if he/she decides that the exit route for the occupants is passage through the affected area. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

II. Other special notes:

The affected area should be isolated. Advise everyone to stay clear of the affected area.

3.3 Emergency actions for carbon monoxide/natural gas leak

3.3.1 <u>Carbon Monoxide/Natural Gas Leak found outside the building impacting the immediate area</u>

I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)

a. Recommended actions (refer to table 3-A1)

(1) Recommended actions for the affected area: in-building relocation.

> Reason:

The occupants may be exposed to the threat. The FDNY recommends relocating the occupants to a safe in-building relocation area.

(2) Recommended actions for the rest of the building: shelter in place.

> Reason:

Since the rest of the building is not affected by the incident, the FLS Director should instruct the occupants to remain where they are.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: in-building relocation.

Reason:

There is no urgent need to move the occupants who are not affected by the incident; however, the FDNY accepts (but does not recommend) if the FLS Director make the choice to move the occupants to safe in-building relocation areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

II. Other special notes:

Isolate the affected area. Advise everyone to stay clear of the affected area.

3.3.2 <u>Carbon Monoxide/Natural Gas Leak found inside the building (in a specific floor/area only)</u>

If the FLS Director or his/her brigade members cannot decide if the gas leak is a major or minor leak, the leak should be treated as a major leak. In this case, the FLS Director should follow the procedure recommended in Section 3.3.3 of this booklet: Carbon Monoxide/Natural Gas Leak found inside the building (throughout the building)

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
- (1) <u>Recommended actions for the affected area</u>: in-building relocation, partial or full evacuation (evacuation P/F).

Reason:

Carbon monoxide gas and natural gas are both flammable and constitute a health hazard. The longer the occupants are exposed to the gas, the more ill they will become. The FLS Director should in-building relocate or evacuate the occupants to an **empty the affected area**. All occupants of the following floors: (1) the affected floor(s) that is/are reported for a suspicious gas leak, (2) the floor above the affected floor, and (3) the floor below the affected floor should be in-building relocated or evacuated, so that they may find fresh, clean air as quickly as possible.

(2) Recommended actions for the rest of the building: shelter in place

> Reason:

If the gas leak is minor and only in a certain small area, the rest of the building is not affected by the incident, the FLS Director should instruct the occupants to remain where they are.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) <u>Acceptable actions for the rest of the building</u>: in-building relocation, partial, or full evacuation (evacuation P/F).

Reason:

There is no urgent need to move the occupants; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to designated safe in-building relocation areas or to safe, well-ventilated outside assembly areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place.

> Reason:

The occupants who are in the affected area should not be sheltered in place. Sheltering the occupants in place may expose them to the threat.

(2) Unacceptable actions for the rest of the building:

Reason:

If the FLS Director chooses to move the occupants, it will not be acceptable to the FDNY if he/she decides that the exit route for the occupants is passage through the affected area. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

II. Other special notes:

The affected area should be isolated. Advise everyone to stay clear of the affected area.

3.3.3 <u>Carbon Monoxide/Natural Gas Leak found inside the building (throughout the building)</u>

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
 - (1) Recommended actions for the affected area: full evacuation.
 - > Reason:

"Full evacuation" will be the only recommended and acceptable action. Once the gas leak is ignited by a spark, it might cause major damage to the occupants and the building structure. In order to prevent a possible catastrophe, it is highly recommended that the entire building be evacuated before the "all clear" is given by the FDNY.

- (2) Recommended actions for the rest of the building: full evacuation.
- > Reason:

"Full evacuation" will be the only recommended and acceptable action. Once the gas leak is ignited by a spark, it might cause major damage to the occupants and the building structure. In order to prevent a possible catastrophe, it is highly recommended that the entire building be evacuated before the "all clear" is given by the FDNY.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: NA.

c. Unacceptable actions: (refer to table 3-C1)

- (1) <u>Unacceptable actions for the affected area</u>: shelter in place, in-building relocation and partial evacuation.
- Reason:

No occupant should be allowed to stay inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: shelter in place, in-building relocation and partial evacuation.

> Reason:

No occupant should be allowed to stay inside the building.

II. Other special notes:

It may be advisable to post a guard at every entrance to limit the access to the building.

3.4 Emergency actions for explosion

3.4.1 An explosion happened directly outside the building impacting the immediate area

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
- (1) Recommended actions for the affected area: in-building relocation.
- Reason:

If an explosion happened outside the building, the building may still be exposed to a threat. The FDNY recommends that the FLS Director move the occupants to safe inbuilding relocation areas.

If the outdoor explosion has severely damaged the building structure, refer to Section 3.4.2 of this booklet: "An explosion happened inside the building".

(2) Recommended actions for the rest of the building: in-building relocation.

> Reason:

If an explosion happened outside the building, the building may still be exposed to a threat. The FDNY recommends that the FLS Director move the occupants to safe inbuilding relocation areas.

If the outdoor explosion has severely damaged the building structure, refer to Section 3.4.2 of this booklet: "An explosion happened inside the building".

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: shelter in place.

> Reason:

It is safer to relocate all occupants to safe in-building relocation areas for outdoor explosion events; however, since the rest of the building may not be affected by the event, the FDNY also accepts (but does not recommend) that the FLS Director suggest to occupants in the rest of the building to remain in place.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

> Reason:

The occupants who are in the affected area should not be sheltered in place. Sheltering the occupants in place may expose them to the threat. The occupants who are in the affected area should be moved.

It is considered to be unacceptable by the FDNY for the FLS Director to evacuate the occupants immediately after the explosion occurs outside the building. It is safer to keep the occupants inside the building until credible information can be gathered and an informed decision can be made.

The partial or full evacuation decision is recommended by the FDNY only when the building structure is damaged. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

It is considered to be unacceptable by the FDNY for the FLS Director to evacuate the occupants immediately after the explosion occurs outside the building. It is safer to keep the occupants inside the building until credible information can be gathered and an informed decision can be made.

The partial or full evacuation decision is recommended by the FDNY only when the building structure is damaged. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

II. Other special notes:

Isolate the affected area. Advise everyone to stay clear of the affected area.

3.4.2 An explosion happened inside the building

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
- (1) Recommended actions for the affected area: full evacuation.

> Reason:

"Full evacuation" will be the recommended and acceptable action by the FDNY for this scenario. An explosion very often causes damage to the building structure, and can cause many serious post explosion injuries among survivors. The FLS Director should determine the best route for all building occupants to leave the building quickly.

Relocation in a building is recommended only when all the paths to the exits are blocked.

(2) Recommended actions for the rest of the building: full evacuation.

> Reason:

"Full evacuation" will be the recommended and acceptable action by the FDNY for this scenario. An explosion very often causes damage to the building structure, and can cause many serious post explosion injuries among survivors. The FLS Director should determine the best route for all building occupants to leave the building quickly.

Relocation in a building is recommended only when all the paths to the exits are blocked.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: NA.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, in-building relocation or partial evacuation.

Reason:

If there is any safe way to leave the building, the FLS Director should not suggest that any occupant stay inside the building. It is unsafe to leave any occupant inside the building before the authorities declare that the building structure is safe and that there are no other explosives inside the building (most bomb attacks have more than 2 explosives).

If the explosion has compromised all safe exit routes, the FLS Director should suggest safe in-building relocation areas for the occupants.

(2) <u>Unacceptable actions for the rest of the building</u>: shelter in place, in-building relocation or partial evacuation.

> Reason:

If there is any safe way to leave the building, the FLS Director should not suggest that any occupant stay inside the building. It is unsafe to leave any occupant inside the building before the authorities declare that the building structure is safe and that there are no other explosives inside the building (most bomb attacks have more than 2 explosives).

If the explosion has compromised all safe exit routes, the FLS Director should suggest safe in-building relocation areas for the occupants.

3.5 Emergency actions for a suspicious (unattended) package

If the suspicious package **has significant feature(s)** indicating that it may **contain explosives**, the FLS Director should refer to Section 3.4 of this booklet: "Emergency Actions for Explosion".

Packages that have lumps, bulges, protruding wires, or aluminum foil; buzz, tick or make a sloshing sound; or, have a bomb threat note related to it could be indicators of a potential bomb.

If there is no clear information what the suspicious package contains, the FDNY provides the following guidance to be followed:

3.5.1 A suspicious package is reported to be located directly outside the building impacting the immediate area

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
- (1) Recommended actions for the affected area: in-building relocation.
- Reason:

If there is a suspicious package located outside the building impacting the immediate occupancy area, even it **does not have any significant feature**(s) indicating that it contains explosives, the building occupants may still be exposed to the potential risk. The FDNY recommends that the FLS Director make the choice to move the occupants to safe in-building relocation areas.

- (2) Recommended actions for the rest of the building: shelter in place.
- Reason:

If there is a suspicious package located outside the building impacting the immediate occupancy area, and it **does not have any significant feature**(s) indicating that it contains explosives. The decision made to implement a shelter in place for the rest of the building is recommended by the FDNY. Because there is no urgent need to move the occupants, the FLS Director should recommend the occupants stay in place.

- b. Acceptable actions: (refer to table 3-B1)
- (1) Acceptable actions for the affected area: NA.

(2) Acceptable actions for the rest of the building: in-building relocation.

> Reason:

There is no urgent need to move the occupants; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to designated safe in-building relocation areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

> Reason:

The occupants who are in the affected area should not be sheltered in place. Sheltering the occupants in place may expose them to the threat. The occupants who are in the affected area should be moved.

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

Reason:

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat. It may be safer for the occupants to remain inside the building.

The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

II. Other special notes:

DO NOT HANDLE THE PACKAGE. Isolate the affected area. Advise everyone to stay clear of the affected area.

3.5.2 A suspicious package is reported inside the building

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
- a. Recommended actions (refer to table 3-A1)
- (1) Recommended actions for the affected area: in-building relocation, partial or full evacuation (evacuation P/F).

Reason:

If a suspicious package(s) is/are found inside the building, even it **does not have any significant feature**(s) indicating that it contains explosives, the occupants may still be exposed to the potential risk. The FLS Director should in-building relocate or evacuate the occupants to **empty the affected area**.

If an evacuation is announced to the occupants, the FLS Director must determine the best route(s) for the occupants. The goal is to stay as far away from the threat as possible. There should not be anyone near or inside the area before the "all clear" is announced by the FDNY/NYPD.

(2) Recommended actions for the rest of the building: shelter in place.

Reason:

If a suspicious package(s) is/are found inside the building, and it **does not have any significant feature**(s) indicating that it contains explosives, the decision made to implement a shelter in place is recommended by the FDNY. Because there is no urgent need to move the occupants, the FLS Director should recommend the occupants stay in place.

b. Acceptable actions: (refer to table 3-B1)

(1) Acceptable actions for the affected area: NA.

(2) Acceptable actions for the rest of the building: in-building relocation, partial or full evacuation (evacuation P/F).

> Reason:

There is no urgent need to move the occupants; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to designated safe in-building relocation areas or to safe, well-ventilated outside assembly areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place.

> Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

(2) <u>Unacceptable actions for the rest of the building:</u> be in close proximity to the suspicious package

> Reason:

If the FLS Director chooses to move the occupants, it will not be acceptable to the FDNY if he/she decides that the exit route for the occupants is passage through the affected area. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

III. Other special notes:

Isolate the affected area. Advise everyone to stay clear of the affected area.

3.6 Emergency actions for civil disturbance (outside the building)

Civil disturbances include riots, demonstrations, threatening individuals, crimes in progress, or assemblies that have become significantly disruptive.

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)

(1) Recommended actions for the affected area: in-building relocation.

> Reason:

If there is a civil disturbance happening outside the building, the occupants may be exposed to the threat. The FDNY recommends relocating the occupants to a safe inbuilding relocation area.

(2) Recommended actions for the rest of the building: shelter in place.

Reason:

Since the rest of the building is not affected by the incident, the FLS Director should instruct the occupants to remain in place.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: in-building relocation.

Reason:

There is no urgent need to move the occupants who are not affected by the incident; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to safe in-building relocation areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

II. Other special notes:

All building entrances (including loading dock, garage door, etc.) should be closed to prevent rioters from entering the building. It may also be advisable to post a guard at every entrance to limit access to the building.

3.7 Emergency actions for building utilities failure

There can be many types of Building Utilities Failure events depending upon the building components and the severity of the failure. FDNY recommends any non-fire emergency (EAP) action (shelter in place, in-building relocation, partial or full evacuation) that is reasonable and justifiable; however, FDNY does not accept sheltering occupants in place if the emergency has compromised the affected area and the occupants will be in danger for remaining in the affected area. In this case, the occupants who are in the affected area should be relocated within the building or be evacuated.

3.8 Emergency actions for a building with physical damage/structural failure

If the FLS Director **cannot decide** if the structural failure is major or minor, he/she **should assume it as a major failure** that may lead to building collapse and take the non-fire emergency (EAP) actions that will protect the occupants from the possible threat.

3.8.1 The building has minor physical damage (such as broken windows), and the damage is in some specific areas that will NOT lead to building collapse.

I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)

a. Recommended actions (refer to table 3-A1)

(1) <u>Recommended actions for the affected area</u>: in-building relocation, partial or full evacuation (evacuation P/F).

> Reason:

If there is a minor physical damage to the building, the FLS Director should inbuilding relocate or evacuate the occupants to empty the affected area; however, if an evacuation is announced to the occupants, the FLS Director must determine the best route(s) for the occupants to avoid the threat. There should not be anyone near or inside the area before the "all clear" is announced by the authority (e.g. FDNY).

(2) Recommended actions for the rest of the building: shelter in place or in-building relocation.

> Reason:

The decision made to implement a shelter in place is recommended by the FDNY. Because there is no urgent need to move the occupants, the FLS Director could recommend that the occupants stay in place; however, it could also be recommended by the FDNY that the FS/EAP or FLS Director may make the choice to relocate all building occupants within the building to ensure their safety.

b. Acceptable actions: (refer to table 3-B1)

- (1) Acceptable actions for the affected area: NA.
- (2) <u>Acceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

There is no urgent need to move the occupants outside the building; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to safe, outside assembly areas.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place.

> Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

(2) <u>Unacceptable actions for the rest of the building:</u>

Reason:

If the FLS Director chooses to move the occupants, it will not be acceptable to the FDNY if he/she decides that the exit route for the occupants is passage through the affected area. The occupants should be alerted to stay away from the affected area, and not to pass through or enter it.

II. Other special notes:

Isolate the affected area. Advise everyone to stay clear of the affected area.

3.8.2 The building has possible severe structural failure (such as a major wall collapse or damage) or the damages are within multiple floors/large areas that may lead to building collapse

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A1)
- (1) Recommended actions for the affected area: full evacuation.

Reason:

"Full evacuation" will be the recommended and acceptable action by the FDNY for this scenario. Severe building structural damage may cause the building to collapse. The FLS Director should determine the best route for all building occupants to leave the building quickly.

In-building relocation is recommended only when all the paths to the exits are blocked.

(2) Recommended actions for the rest of the building: full evacuation.

> Reason:

"Full evacuation" will be the recommended and acceptable action by the FDNY for this scenario. Severe building structural damage may cause the building to collapse. The FLS Director should determine the best route for all building occupants to leave the building quickly.

In-building relocation is recommended only when all the paths to the exits are blocked.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of building: NA.

c. Unacceptable actions: (refer to table 3-C1)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, in-building relocation, or partial evacuation.

Reason:

If there is any safe way to leave the building, the FLS Director should not suggest any occupant stay inside the building. It is unsafe to leave any occupant inside the building before the authorities declare the building structure is safe.

If all safe exit routes are compromised, the FLS Director should suggest safe inbuilding relocation areas for the occupants.

(2) <u>Unacceptable actions for the rest of the building</u>: shelter in place, in-building relocation, or partial evacuation.

Reason:

If there is any safe way to leave the building, the FLS Director should not suggest any occupant stay inside the building. It is unsafe to leave any occupant inside the building before the authorities declare the building structure is safe.

If all safe exit routes are compromised, the FLS Director should suggest safe inbuilding relocation areas for the occupants.

II. Other special notes:

All building entrances should be closed.

3.9 Emergency actions for natural disaster

The recommended/acceptable/unacceptable actions for the natural disasters should depend upon whether a given disaster causes structural damage to the building, or it causes any building utilities failure.

3.9.1 Natural disaster and the building structure is not compromised

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A2)
- (1) Recommended actions for the affected area: in-building relocation.
- > Reason:

It is a general natural disaster procedure (such as, earthquake, hurricane, tornadoes, storms) not to spontaneously evacuate. It is safer to stay inside the building rather than leaving the building to avoid falling or flying debris. The window areas (in earthquake conditions, it might also include areas with mirrors and overhead fixtures) are the most vulnerable areas in most natural disasters.

The FLS Director should relocate the occupants of the affected area to safe in-building relocation areas.

- (2) Recommended actions for the rest of the building: shelter in place.
- > Reason:

Since the rest of the building is not affected by the incident, the FLS Director should instruct the occupants to remain in place.

b. Acceptable actions: (refer to table 3-B2)

(1) Acceptable actions for the affected area: NA.

(2) Acceptable actions for the rest of the building: in-building relocation.

> Reason:

There is no urgent need to move the occupants who are not affected by the incident; however, the FDNY accepts (but does not recommend) if the FLS Director chooses to move the occupants to safe in-building relocation areas.

c. Unacceptable actions: (refer to table 3-C2)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

> Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

Evacuating the occupants and exposing them to the outside natural disaster will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat. It may be safer for the occupants to remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

Evacuating the occupants and exposing them to the outside natural disaster will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat. It will probably be safer for the occupants to remain inside the building.

3.9.2 Natural disaster causing minor building physical damage (such as broken windows), which will NOT cause the building to collapse

If the FLS Director **cannot decide** if the building physical damage is major or minor, he/she **should assume it as a major building structural failure** that may lead to building collapse and take the non-fire emergency (EAP) actions that will protect the occupants from the possible threat.

I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)

a. Recommended actions (refer to table 3-A2)

(1) Recommended actions for the affected area: in-building relocation.

Reason:

If there is minor physical damage to the building, the FLS Director should in-building relocate the occupants to empty the affected area. There should not be anyone near or inside the area before the "all clear" is announced by the authority.

(2) Recommended actions for the rest of the building: shelter in place or in-building relocation.

> Reason:

The decision made to implement a shelter in place is recommended by the FDNY. Because there is no urgent need to move the occupants, the FLS Director could recommend to the occupants to stay in place; however, it could also be recommended by the FDNY that the FLS Director make the choice to relocate all building occupants within the building to ensure their safety.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: NA.

c. Unacceptable actions: (refer to table 3-C2)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

It is safer to stay inside the building so as to avoid falling or flying debris rather than leave the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

It is safer to stay inside the building so as to avoid falling or flying debris rather than leave the building.

II. Other special notes:

Isolate the affected area. Advise everyone to stay clear of the affected area.

3.9.3 A natural disaster which caused major building structural failure that may cause building collapse

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A2)
- (1) Recommended actions for the affected area: full evacuation.
- > Reason:

"Full evacuation" will be the recommended and acceptable action by the FDNY for this scenario. Severe building structural damage may cause the building to collapse. The FLS Director should determine the best route for all building occupants to leave the building quickly.

In-building relocation is recommended only when all the paths to the exits are blocked.

(2) Recommended actions for the rest of the building: full evacuation.

> Reason:

"Full evacuation" will be the recommended and acceptable action by the FDNY for this scenario. Severe building structural damage may cause the building to collapse. The FLS Director should determine the best route for all building occupants to leave the building quickly.

In-building relocation is recommended only when all the paths to the exits are blocked.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of building: NA.

c. Unacceptable actions: (refer to table 3-C2)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, in-building relocation, or partial evacuation.

Reason:

If there is any safe way to leave the building, the FLS Director should not suggest any occupant stay inside the building. It is unsafe to leave any occupant inside the building before the authorities declare the building structure is safe.

If all safe exit routes are compromised, the FLS Director should suggest safe inbuilding relocation areas for the occupants.

(2) <u>Unacceptable actions for the rest of the building</u>: shelter in place, in-building relocation, or partial evacuation.

Reason:

If there is any safe way to leave the building, the FLS Director should not suggest any occupant stay inside the building. It is unsafe to leave any occupant inside the building before the authorities declare the building structure is safe.

If all safe exit routes are compromised, the FLS Director should suggest safe inbuilding relocation areas for the occupants.

II. Other special notes:

All building entrances should be closed.

3.9.4 Building power failure which is caused by a natural disaster

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
 - a. Recommended actions (refer to table 3-A2)

(1) Recommended actions for the affected area: shelter in place or in-building relocation.

> Reason:

It is safer to stay inside the building to avoid falling or flying debris and wait for the authorities rather than leaving the building; however, FDNY does not accept sheltering occupants in place if the emergency has compromised the affected area and the occupants will be in danger for remaining in the affected area. In this case, the occupants who are in the affected area should be relocated within the building or be evacuated.

(2) Recommended actions for the rest of the building: shelter in place or in-building relocation.

> Reason:

It is safer to stay inside the building to avoid falling or flying debris and wait for the authorities rather than leaving the building.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: NA.

c. Unacceptable actions: (refer to table 3-C2)

(1) <u>Unacceptable actions for the affected area</u>: partial or full evacuation (evacuation P/F).

Reason:

If there is a natural disaster occurring outside, instructing the occupants to leave the building may result in more injuries than suggesting that they remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

If there is a natural disaster occurring outside, instructing the occupants to leave the building may result in more injuries than suggesting that they remain inside the building.

3.9.5 The building affected by flooding caused by a natural disaster

- I. Non-fire emergency (EAP) actions (recommended, acceptable and unacceptable)
- a. Recommended actions (refer to table 3-A2)
- (1) Recommended actions for the affected area: in-building relocation.
- > Reason:

The FLS Director should relocate the occupants of the affected area to safe in-building relocation areas.

(2) Recommended actions for the rest of the building: shelter in place or in-building relocation.

Reason:

The decision made to implement a shelter in place is recommended by the FDNY. Because there is no urgent need to move the occupants, the FLS Director could recommend the occupants stay in place; however, it is also could be recommended by the FDNY that the FLS Director make the choice to relocate all building occupants within the building to ensure their safety.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: NA.

c. Unacceptable actions: (refer to table 3-C2)

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

> Reason:

The occupants who are in the affected area should be moved. The decision made to shelter in place may expose the occupants to the threat.

Evacuating the occupants and exposing them to the outside natural disaster will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to avoid the threat; it may be safer for the occupants to remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

Evacuating the occupants and exposing them to the outside natural disaster will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to avoid the threat. It may be safer for the occupants to remain inside the building.

II. Other special notes:

Isolate the affected area. Advise everyone to stay clear of the affected area.

Table 3-A1. **RECOMMENDED** non-fire emergency actions for different scenarios

	The location where the scenario occurs							
	Outside the building		Inside the	building	inside the building			
Scenario			(in a specific	c area only)	(possibly affecting multiple floors)			
	Affected area	The rest of the	Affected area	The rest of the	Affected area	The rest of the		
		building		building		building		
Biological	✓ <u>In-building</u>	✓ <u>Shelter in place</u>	✓ <u>Isolate the individuals</u>	✓ <u>Shelter in place</u>	✓ <u>Isolate the individuals</u>	✓ <u>Shelter in place</u>		
Agent Release	<u>relocation</u>		who were directly	✓ <u>In-building relocation</u>	who were directly			
			exposed to the agent	(01 1 1 1	exposed to the agent	(21 1 1 1		
Chemical	✓ <u>In-building</u>	✓ <u>Shelter in place</u>	✓ <u>In-building relocation</u>	✓ <u>Shelter in place</u>	✓ <u>In-building relocation</u>	✓ <u>Shelter in place</u>		
Agent Release	<u>relocation</u>		✓ Evacuation (P/F)*		✓ Evacuation(P/F)*			
CO/Natural	✓ <u>In-building</u>	✓ Shelter in place	✓ <u>In-building relocation</u>	✓ Shelter in place	✓ Full Evacuation	✓ Full Evacuation		
Gas release	<u>relocation</u>		✓ Evacuation (P/F)*					
Explosion	✓ <u>In-building</u>	✓ <u>In-building</u>	✓ Full evacuation	✓ Full evacuation	✓ Full evacuation	✓ Full evacuation		
	<u>relocation</u>	<u>relocation</u>						
Suspicious	✓ <u>In-building</u>	✓ <u>Shelter in place</u>	✓ <u>In-building relocation</u>	✓ <u>Shelter in place</u>	✓ <u>In-building relocation</u>	✓ <u>Shelter in place</u>		
package	<u>relocation</u>		✓ Evacuation(P/F)*		✓ Evacuation(P/F)*			
Civil	✓ <u>In-building</u>	✓ <u>Shelter in place</u>						
disturbances	<u>relocation</u>							
Failure of	NA		✓ Shelter in place	✓ Shelter in place	✓ Shelter in place	✓ Shelter in place		
building			✓ <u>In-building relocation</u>	✓ <u>In-building relocation</u>	✓ <u>In-building relocation</u>	✓ <u>In-building</u>		
utilities			✓ Evacuation(P/F)*	✓ Evacuation(P/F)*	✓ Evacuation(P/F)*	relocation		
utilities						✓ Evacuation(P/F)*		
Building	NA		Building has minor physical damages		Building suffers major structural failure			
damage			Affected area	The rest of the	Affected area	The rest of the		
				building		building		
			✓ <u>In-building relocation</u>	✓ <u>Shelter in place</u>	✓ Full Evacuation	✓ <u>Full Evacuation</u>		
			✓ Evacuation(P/F)*	✓ <u>In-building relocation</u>				
Active	✓ <u>In-building</u>	✓ <u>In-building</u>	✓ <u>ABC</u> **	✓ <u>ABC</u> **	✓ <u>ABC</u> **	✓ <u>ABC</u> **		
Shooter	relocation	relocation						

^{*}Note: Evacuation (P/F): Partial or Full Evacuation; **Note: ABC: Avoid, Barricade, Confront

Table 3-A2. RECOMMENDED non-fire emergency actions for natural disasters

Scenario	Affected Area	The rest of the building
Natural disaster and the building structure is not	✓ <u>In-building relocation</u>	✓ Shelter in place
compromised		
A natural disaster causing minor building physical	✓ <u>In-building relocation</u>	✓ <u>In-building relocation</u>
damage		✓ <u>Shelter in place</u>
A natural disaster causing major building structural	✓ <u>Full Evacuation</u>	✓ <u>Full Evacuation</u>
failure		
Building power failure which is caused by a natural	✓ <u>Shelter in place</u>	✓ Shelter in place
disaster	✓ <u>In-building relocation</u>	✓ <u>In-building relocation</u>
The building affected by flooding caused by a natural	✓ <u>In-building relocation</u>	✓ Shelter in place
disaster		✓ <u>In-building relocation</u>

Table 3-B1. ACCEPTABLE non-fire emergency actions for different scenarios

	The location where the scenario occurs						
	Outside the building		Inside the building		inside the building		
Scenario			(in	a specific area only)	(possibly affecting multiple floors)		
	Affected area	The rest of the building	Affected area	The rest of the building	Affected area	The rest of the building	
Biological Agent Release		In-building relocation		■ Evacuation (P/F)*		In-building relocationEvacuation (P/F)*	
Chemical Agent Release		 In-building relocation 		In-building relocationEvacuation (P/F)*		In-building relocationEvacuation (P/F)*	
CO/Natural Gas release		In-building relocation		In-building relocationEvacuation (P/F)*			
Explosion		• Shelter in place					
Suspicious package		In-building relocation		In-building relocationEvacuation(P/F)*		In-building relocationEvacuation(P/F)*	
Civil disturbances		In-building relocation					
Failure of building utilities	NA						
Building damage	ge NA		Building has minor physical		Building suffers major structural		
			damages		failure		
			Affected	The rest of the building	Affected area	The rest of the	
			area			building	
		1		Evacuation(P/F)*			
Active Shooter		• Shelter in place					

*Note: Evacuation (P/F): Partial or Full Evacuation

Table 3-B2. ACCEPTABLE non-fire emergency actions for natural disasters

Scenario	Affected Area	The rest of the building
Natural disaster and the building structure is not		In-building relocation
compromised		
A natural disaster causing minor building physical damage		
A natural disaster causing major building structural failure		
Building power failure which is caused by a natural disaster		
The building affected by flooding caused by a natural		
disaster		

Table 3-C1. UNACCEPTABLE non-fire emergency actions for different scenarios

The location where the scenario occurs						
	Outside th	ne building	Inside the bu	O	inside the building (possibly affecting multiple floors)	
Scenario		T	(in a specific a			
	Affected area	The rest of the building	Affected area	The rest of the building	Affected area	The rest of the building
Biological Agent Release	Shelter in placeEvacuation (P/F)*	➤ Evacuation (P/F)*	 Not isolate the individuals who were directly exposed to the agent 		 Not isolate the individuals who were directly exposed to the agent 	
Chemical Agent Release	Shelter in placeEvacuation (P/F)*	➤ Evacuation (P/F)*	≭ Shelter in place		★ Shelter in place	
CO/Natural Gas release	➤ Shelter in place ➤ Evacuation (P/F)*	➤ Evacuation (P/F)*	* Shelter in place		Shelter in placeIn-building relocationPartial evacuation	Shelter in placeIn-building relocationPartial evacuation
Explosion	➤ Shelter in place ➤ Evacuation (P/F)*	➤ Evacuation (P/F)*	Shelter-in-placeIn-building relocationPartial evacuation	Shelter-in-placeIn-building relocationPartial evacuation	Shelter in placeIn-building relocationPartial evacuation	Shelter in placeIn-building relocationPartial evacuation
Suspicious package	Shelter in placeEvacuation (P/F)*	➤ Evacuation (P/F)*	≭ Shelter-in-place		➤ Shelter in place	
Civil disturbances	Shelter in placeEvacuation (P/F)*	➤ Evacuation (P/F)*				
Building utilities failure	NA	1				
Building	NA		Building has minor physical damages		Building suffers major structural failure	
damage			Affected area	The rest of the building	Affected area	The rest of the building
			* Shelter in place		Shelter in placeIn-building relocationPartial evacuation	Shelter in placeIn-building relocationPartial evacuation
Active shooter	Shelter in placeEvacuation (P/F)*	≭ Evacuation (P/F)*				

^{*}Note: Evacuation (P/F): Partial or Full Evacuation

Table 3-C2. UNACCEPTABLE non-fire emergency actions for natural disasters

Scenario	Affected Area	The rest of the building	
Natural disaster and the building structure is not compromised	Shelter in placeEvacuation(P/F)*	➤ Evacuation (P/F)*	
A natural disaster causing minor building physical damage	Shelter in placeEvacuation(P/F)*	➤ Evacuation (P/F)*	
A natural disaster causing major building structural failure	Sheter in placeIn-building relocationPartial evacuation	Sheter in placeIn-building relocationPartial evacuation	
Building power failure which is caused by a natural disaster	➤ Evacuation(P/F)*	➤ Evacuation(P/F)*	
The building affected by flooding caused by a natural disaster	Shelter in placeEvacuation(P/F)*	≭ Evacuation(P/F)*	

^{*}Note: Evacuation (P/F): Partial or Full Evacuation

4. ACTIVE SHOOTER EMERGENCY

4.1 Introduction

The definition of an active shooter is: <u>An individual actively engaged in killing or attempting to kill people in a confined and populated area</u>; in most cases, active shooters use firearms and there is no pattern or method to their selection of victims.

The type of police response to an active shooter attack depends on the unique circumstances of the incident. In the event of such an attack, the Fire and Life Safety (FLS) Director should follow the instructions of the first-responders from the NYPD or other law enforcement agency present at the scene.

However, active shooter situations by their very nature are unpredictable and the situations evolve quickly. Although the NYPD will immediately respond to this incident upon notification, it may still take 3 to 5 minutes or longer for the police officers to arrive at the scene.

According to a Study of Active Shooter Incidents (2000 – 2013) report prepared by the U.S. Department of Justice, in 64 incidents where the duration of the incident could be ascertained, 23 (35.9%) incidents ended in 2 minutes or less and 21 (32.8%) incidents ended in 2 to 5 minutes. This means even when the NYPD was present or able to respond within minutes, civilians (including FLS staff members and tenants) often had to make life and death decisions of their own accord.

4.2 Preparation and training for an active shooter situation

Emergencies involving an active shooter(s) are fluid and unpredictable. The FDNY developed these recommendations based on other reliable law enforcement sources. Unlike other guides on active shooter attacks, this guide provides recommendations tailored to FLS Directors. Based on the Active Shooter: Recommendations and Analysis for Risk Mitigation booklet developed by the NYPD, the FDNY recommends that FLS Directors and/or building security personnel (e.g. security manager) prepare his/her building and/or building occupants for the following:

4.2.1 **Building preparedness**

- Assess what mass notification channels the building has.
 For example, some hotels may have installed emergency alert system that the emergency notification can be broadcasted on every television in guest rooms.
- Designate an alternative location if the Fire Command Center becomes compromised. The
 designated alternative location must be identified in the FDNY plan.

- Assess the function of the building elevator system.
- Keep a copy of the Fire Safety and Evacuation Plan, Building Information Card and floor plans at the Fire Command Center.
- Provide at least 4 "First Responder Kits" containing building floor plans, Building Information Card, fully charged premises security radios/walkie-talkies (if available), access cards and keys for first responders use. The FDNY recommends that the "First Responder Kit" should be placed in the Fire Command Center. It should also be easy to carry away by the FLS Director. Because the FLS Director might not be able to remain at the Fire Command Center to carry out his/her responsibilities while an active shooter emergency occurs. The arriving first responders will need the First Responder Kit to access the building.
- Incorporate active shooter training in non-fire emergency drills.
- Develop the plan with different parties including security, facility engineers, human resources department, emergency management, risk management, etc. The FDNY recommends to develop the plan and to effectively train all occupants to prevent, prepare, and respond to an active shooter incident.
- Recommend the building security personnel (e.g. security manager) to
 - conduct a realistic security assessment to determine the facility's vulnerability to an active shooter attack.
 - vary security guards' patrols and patterns of operation so that criminals never know exactly when security will be present.
- Recommend the employer or building manager to establish a procedure for reporting workplace violence.

Under the General Duty Clause, Section 5(a)(1) of the Occupational Safety and Health Act (OSHA) of 1970, employers are required to provide their employees with a place of employment that "is free from recognizable hazards that are causing or likely to cause death or serious harm to employees." The FDNY recommends that employers should allow employees who have safety concerns to submit the report. Early reporting of perceived workplace violence allows management to quickly address and correct a problem before it becomes more severe.

The NYPD's analysis demonstrates that in many cases active shooter attacks resulted from disagreements among former or current employees of the organization. The FDNY

recommends that the FLS Director and the security manager should be notified in advance of terminations and other situations that may lead to aggressive behavior. Awareness and cooperation of public safety, management, supervisors and all other employees is critical to reduce the threat of violence.

• Recommend the employer or building owner to provide or designate barricade locations within tenant spaces that provides an area with ballistic cover, not just visual concealment. The ideal locations should have thick walls, solid doors with locks, minimal windows, first-aid emergency kits, communication devices, and duress alarms (a silent signal to a central annunciator panel to notify the emergency situation). If your employer or building owner cannot provide such space, as an FLS Director, you should discuss with the building occupants how to evacuate or barricade safely during an active shooter incident.

The majority of buildings in NYC are not occupied by a single tenant, and therefore each tenant may have their own active shooter plan. As an FLS Director, the FDNY requires you to share the building emergency plan with all the tenants and, through training and drills, encourage them to be familiar with the building policy. The FDNY also recommends you to understand each tenant's plan.

The FDNY recommends the FLS Director in conjunction with the building owner to develop a protocol to identify any building staff or tenant on the premises who has a firearm carry license. The FDNY also recommends that the building should provide these individuals vests, armbands, hats or other form of identification. The FLS Director should also describe the identification type in the First Responders Kit.

These individuals with firearm carry license should be trained that they must identify themselves to building occupants and the first responders by donning the form of identification. They should also be instructed to comply with officer instruction when law enforcement arrive on scene. For example, civilians who possess legal permit to carry a firearm must know that they have to follow the direction of on duty officers. Retired law enforcement and plain clothes officers must always follow the direction of on duty in uniform officers in a challenge situation.

4.2.2 **Training**

Building occupants should be trained that the Manual Fire Alarm System should NOT be
activated for an active shooter emergency. The manual pull stations should only be
activated during fire or smoke conditions.

- * Real case: March 24, 1998: Two shooters opened fire outside their middle school, killing five people and wounding 10 others. Prior to the attack, the shooters pulled the fire alarm, luring the students and teachers outside the building and into the shooters' line of fire.
- * Pulling the fire alarm facilitates evacuation but does not facilitate the "proper" Avoid-Barricade-Confront tactics. Although escaping is generally a good strategy during an active shooter incident, the way people leave actually plays a more important role. People act very differently when they believe there is fire versus when they realize there is a shooter. People will walk directly toward the nearest exit if the fire alarm is sound. However, people will look around cautiously and try to stay away from the shooter during the evacuation if they are clearly notified that there is a shooter in their vicinity.



- * In addition, pulling a fire alarm also causes confusion to the building staff (FLS Director, building engineers, securities, etc.) and the first responders. They will need more time to investigate if there is a fire/smoke condition. It will take a longer time to gather critical information regarding the shooting. Pulling the fire alarm may get the Fire Department to respond first; however, the NYPD will be the primary first responders who will control the shooting scene. Firefighters or emergency medical personnel will provide assistance as NYPD allows.
- If a fire alarm is activated, if safe to do so, the FLS Director should follow standard protocol and procedures of a fire emergency but proceed with extreme caution and keep the NYPD survival techniques (Avoid-Barricade-Confront) in mind.
- The most important concept to share with the building occupants is the survival techniques to use. The survival techniques can be fluid based on the threat and may not have to be followed **in any specific order**. Individual decisions should be made based on the active shooter's location(s).

1. Avoid (run/evacuate)



If there is an accessible escape path, attempt to evacuate the premises.

Be sure to discuss with the occupants the following:

- o Have an escape plan and route in mind.
- Visualize the entire escape route before beginning to move, and avoid using elevators or escalators.
- o Evacuate regardless of whether others agree to follow.
- Leave your belongings behind, DO NOT CARRY ANY PACKAGES OR ITEMS THAT COULD BE CONFUSED AS A WEAPON OR EXPLOSIVE DEVICE.
- o Help others escape, if possible.
- Prevent individuals from entering an area where the active shooter may be.
- State whether the doors in the stairways of the building are locked to prevent re-entry into the building, and, if so, on what floors re-entry is allowed (for most buildings, at least every fourth floor). The FLS Director should inform the building occupants that the locked doors may still be locked during an active shooter incident. Once the building occupants enter the stairway, they may need to walk down to the street level and may not be able to re-enter to any floor they want.
- Call 911 when it is safe to do so. Provide the pertinent information (discussed in detail below).

2. Barricade (hide)



If it is not possible to evacuate, find a place to barricade yourself where the active shooter is least likely to find you.

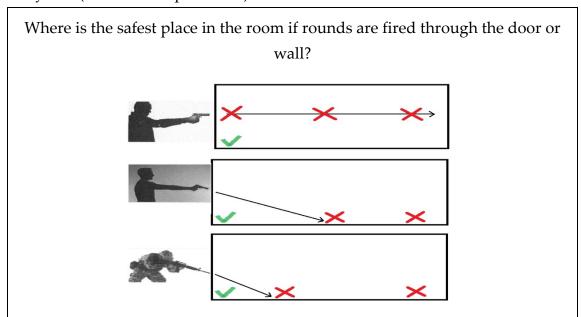
(1) Where to barricade:

- Ideal barricade place should be out of the active shooter's view, but not just visual concealment. Soft wall cubicles and desks may conceal but provide no substantial ballistic protection.
- Ideal barricade place should be an area with both visual concealment and ballistic cover that can provide protection if shots are fired in your direction. Cover should be something of substantial thickness and weight that will stop a bullet. Office furniture and equipment such as vending machines, copy machines, and file cabinets can stop many types of bullets.
- An ideal barricade place should not trap or restrict your options for movement.

(2) What to do when barricading:

- Lock the door, if applicable.
- Blockade the entrance with heavy furniture, if applicable. DO NOT use your body to barricade.
- o Silence, not vibrate, your cell phone, pager and/or any other electronic devices.
- o Turn off any source of noise (i.e., radios, televisions).
- o Hide behind large items (i.e., file cabinets, copy machines, vending machines).
- o Remain quiet.

o Stay low (see the example below).



3. Confront (fight/take action)



If it is not possible to avoid and/or barricade, as a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter:

- o Collaborate and act as a group, if possible.
- o Act aggressively.
- o Throw items and improvise weapons.
- o Yell.
- o Commit to your actions.
- Train building occupants to call 911 as soon as it is safe to do so and provide the following information to 911 operator, if known:
 - Building address, location of the active shooter or his/her last known location.

- Number of shooters, if more than one.
- Physical description of shooter(s).
- o Name/identity of the shooter(s) (e.g. employee).
- Number and type of weapons held by the shooter(s).
- o Number of potential victims at the location.
- If explosions were heard.

*Note: If you cannot speak, leave the line open and allow the dispatcher to listen.

- In addition, the building occupants must be trained or informed that after calling 911, they
 have to also notify FLS Director or other designated FLS staff of the emergency on the
 premises. The emergency contact information (including 911 number and designated FLS
 staff phone number, etc.) should be provided to every building occupant.
- Train building occupants how to properly interact with police officers:
 - Follow all official instructions.
 - o Do not attempt to run towards or grab onto police officers.
 - o Resist the urge to turn quickly or make any sudden movements.
 - DO NOT CARRY ANY PACKAGES OR ITEMS THAT COULD BE CONFUSED AS A WEAPON OR EXPLOSIVE DEVICE.
 - Avoid pointing, screaming and/or yelling.
 - Keep your hands out, open, and above your head, fingers spread apart, and most importantly, EMPTY.



 Do not interfere with responding officers: Do not stop to ask officers for help or direction when evacuating. Just proceed in the direction from which officers are entering the premises.

- Remember that the first police officers to arrive to the scene may not stop to help injured persons. Expect teams comprised of additional officers and emergency medical personnel to follow the initial responding officers. These teams will treat and remove any injured persons from the areas that have been cleared by the first responding police officers. They may also call upon able-bodied occupants to assist in removing the wounded from the premises.
- Remain calm.
- o Be prepared to assist and follow instructions of police officers.

Summary for the Required Training

Focus on teaching building occupants basic concepts and basic actions, and make sure they perform them well. In summary, after training, the building occupants should know the following:

1. Survival techniques

Discuss the 3 survival techniques (Avoid-Barricade-Confront) when an active shooter is in their vicinity. Describe in detail how to carry out the techniques.

2.<u>Information for 911 operators</u>

Discuss what information should be provided to the 911 operators.

3. How to respond when police officers arrive on the scene

Inform the occupants what to expect when police officers arrive on scene.

4.2.3 Recommended resources

NYPD Shield provides a pamphlet on active shooter emergencies. The FDNY highly recommends the FLS Director to distribute the pamphlet to all the building occupants.

The following on-line training videos can also be used as part of the training material for the building occupants:

FBI.gov: https://www.fbi.gov/about-us/cirg/active-shooter-and-mass-casualty-incidents/run-hide-fight-video

US Department of Homeland Security: https://emilms.fema.gov/is907/index.htm

There are many training courses offered by law enforcement agencies (NYPD, DHS, FBI, etc.) that provide guidance so that managers and employees can prepare to respond to an active shooter

situation. For example, NYPD SHIELD addresses private sector businesses on both an industry-specific and a geographic basis. This enables the NYPD to best serve the unique needs of each constituency. The FDNY highly recommends for every building to contact NYPD SHIELD at: 718-615-7506 or www.nypdshield.org to apply for membership and to schedule active shooter training.

In addition, active shooter training courses are provided by the Federal Law Enforcement Training Centers (FLETC) via the following link: http://www.dhs.gov/active-shooter-preparedness

The manual, "Active Shooter: How to Respond", published by the US Department of Homeland Security recommends how human resources departments and facility managers should engage in planning for responses if an active shooter event occurs.

4.2.4 Preparing responses during active shooter incidents in different occupancies

Compared to office high-rise building occupancies, hotels and public assembly occupancies (e.g. shopping malls, theaters, etc.) present different challenges during active shooter incidents:

- 1. Occupants' familiarity with the building structure: Most occupants in office buildings are employees who are familiar with their building emergency procedures based on the Fire Code requirements. However, hotels and public assembly areas have very transient populations, which results in less (if any) occupant familiarity with the building's safety features, exit routes, stairways, etc.
- 2. **Occupants' familiarity with the building staff:** In commercial office buildings, tenants are familiar with the security personnel and fire safety staff because they interact with them frequently. Occupants in hotels and public assembly areas have little, if any, pre-existing relationships with the facility staff, which make it difficult to find help.
- 3. **Language challenges:** In office buildings, the pre-incident relationships tend to foster an understanding of the building's various tenants and their languages. Language challenges are more likely to occur in hotels and public assembly areas.
- 4. **Different daily occupancy rates**: Most office buildings have "office hours," where the building's population is significantly greater than at other times (nights and weekends). However, hotels and public assembly areas may have peak occupancy during the nights and on weekends, increasing the risk with lower staffing levels during nights, weekends, or holidays.

FDNY recommends that guests of hotels and theaters should be informed of at least two exits or the exit sign(s) of their floor. The visitors should know where to exit during any type of

emergency. Knowledge of evacuation routes will help the visitors to run out of the facility or away from the area under attack.

4.3 Active shooter emergency responses

Because active shooter attacks are dynamic events, the FDNY cannot put forth a set of required actions during such incidents. However, the FDNY has compiled a list of best practice recommendations based on materials developed by the New York City Police Department, U.S. Department of Homeland Security, and U.S. Department of Justice for FLS staff to best prepare if active shooter attack occurs. The following recommendations are **general guidelines**. They are considered as best practice and may be useful in a real life emergency. It is NOT the purpose of this training material to provide unbending, absolute rules for situations in which there are a great many variables. The most appropriate emergency actions may vary depending on the specific active shooter situation which occurs within the context of the event, the building design and components.

The FDNY has created three categories of response actions for all non-fire emergencies: they are "RECOMMENDED", "ACCEPTABLE" and "UNACCEPTABLE".

- The <u>recommended actions</u>- the actions that the FDNY strongly recommends the applicants should apply for the specific scenarios.
- The <u>acceptable actions</u> the actions that the FDNY accepts but not recommends.
- The <u>unacceptable actions</u> the actions that the FDNY does not encourage the applicants to apply for the specific scenarios.

The study material is NOT a mandate regarding EAP actions; it is only providing a rule of thumb for general emergency situations. The most appropriate EAP actions may vary depending on the specific emergency situation which occurs within the context of the building design and components.

4.3.1 If an active shooter is outside the building

a. Recommended actions

- (1) Recommended actions for the affected area: in-building relocation.
- (2) Recommended actions for the rest of the building: in-building relocation.

> Reason:

Active shooter emergencies are very unpredictable and the situations evolve quickly. Because bullets may travel for miles, the FDNY recommends relocating ALL the occupants to safe in-building relocation areas.

b. Acceptable actions:

- (1) Acceptable actions for the affected area: NA.
- (2) Acceptable actions for the rest of the building: shelter in place.

> Reason:

It is safer to relocate the tenants of the rest of the building to safe in-building relocation areas; however, the FDNY accepts (but does not recommend) that the FLS Director suggests occupants in the rest of the building to remain in place.

c. Unacceptable actions:

(1) <u>Unacceptable actions for the affected area</u>: shelter in place, partial or full evacuation (evacuation P/F).

> Reason:

The occupants who are in the affected area should be moved to a safer location. The decision made to shelter in place may expose the occupants to the threat. Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

(2) <u>Unacceptable actions for the rest of the building</u>: partial or full evacuation (evacuation P/F).

> Reason:

Evacuating the occupants and exposing them to the outside threat will be considered an unacceptable action by the FDNY for this scenario. The FLS Director should direct the occupants to stay away from the threat; it may be safer for the occupants to remain inside the building.

III. Other special notes:

All building entrances (including loading docks, garage doors, etc.) should be secured to prevent the shooter(s) from entering the building.

4.3.2 If an active shooter is inside the building

a. Recommended actions

(1) Recommended actions for the WHOLE building:

If an active shooter event occurs inside your building, as an FLS Director, you may be a victim at the scene. You should react quickly when gunshots are heard and/or when a shooting is witnessed by following one of the three tactics: **Avoid**, **Barricade**, **Confront** (refer to the training section of

the FLSD booklet). As a civilian, you are not expected to neutralize an active shooter threat. The FDNY does not recommend that you leave the post to personally respond to incident on affected floors. However, you should try to implement the actions that could minimize the injuries to the building occupants.

For example, if an active shooter starts shooting in close proximity of the Fire Command Center, you should protect yourself based on the tactics suggested by the NYPD. You may run away from the lobby, or you may hide in a safe barricaded location at that moment. Grab the "First Responder Kits" if possible. All of these are a personal choice to be decided on by you at that moment.

Call 911 as soon as possible, safety permitting. Once you feel it is safe to return to the Fire Command Center or designated alternative location, if safe to do so, return to carry out your suggested responsibilities.

The following actions are recommended by the FDNY upon active shooter events, IF YOU FEEL IT IS SAFE TO DO SO:

Immediately call 911. The call(s) should report: (1) the emergency situation and (2) FLS action implemented. The following information, if known, should also be provided to the 911 operator:

- a. Building address, location of the active shooter or his/her last known location.
- b. Number of shooters, if more than one.
- c. Physical description of shooter(s).
- d. Name/identity of the shooter(s) (e.g. employee).
- e. Number and type of weapons held by the shooter(s).
- f. Number of potential victims at the location.
- g. If explosions were heard.

*Note: If you cannot speak, leave the line open and allow the dispatcher to listen.

As an FLS Director, if safe to do so, immediately report to the Fire Command Center. The Fire Command Center should be used for command, communication and control of the emergency. If the Fire Command Center is compromised, try to reach the designated alternative location that could allow you to carry out the following responsibilities:

• Notify the occupants

The building occupants need to know that there is an active shooter in the building. Depending on the building communication systems, the alert should be delivered via as many different methods as possible (e.g. public announcement system, mass notification system, text, email, etc.).

The notification should be a conveyance of information, not an issuance of a command. The alert must indicate that there is an active shooter event taking place inside the building and, if possible, tell the occupants where the shooter was last seen. Many companies and associations strongly advocate the position that announcements over the PA system are beneficial and will immediately notify all occupants to implement recognized strategies. Immediate notification is critical. Delaying the notification may leave all occupants vulnerable, confused and in panic. A clear notification can help people quickly avoid a dangerous event. Many people think the notification may cause panic in the event of life threatening emergency. However, research has shown that clear information about the incident and what actions to take will decrease the risk of panic by making people respond quickly and hence not exposing them to danger.

Although FDNY does not define "immediately", the intent of a notification during active shooter incidents is to enable people to protect themselves. This means that a warning should be issued as soon as pertinent information is available.

The Higher Education Act (HEA) also required all postsecondary educational institutions participating in HEA's Title IV program immediately to notify the campus community upon confirmation of a dangerous situation occurring on the campus that involves an immediate threat to the campus occupants. The US Department of Education encourages higher educational institutions to consider overlapping means of communication in case one method fails or malfunctions. Make a complete list of whatever methods will be used (or will potentially be used depending on the situation): a public address system, text messaging, e-mail messaging, emergency phone lines, etc. If any of the emergency notification services require the campus community to sign up, include specific information on how to do this. Institutions must ensure that notifications and warnings can be transmitted quickly to all students and employees. Therefore, an institution would not be able to rely solely on a text messaging system if all members of the campus community are not required to participate in that system. Similarly relying on an e-mail would not be adequate for institutions that do not establish an e-mail account for all students and employees, or require each member of the campus community to register an e-mail address with the institution.

The Fire Code prohibits the use of pre-recorded voice message. But the FDNY recommends that FLS Directors to prepare or practice the message template in case an active shooter emergency occurs. FLS Directors also need to think in advance what notification system can best be used to notify building occupants. FLS Directors should prepare themselves, train FLS staff and run the practice. FLS Directors should find what

kind of notification system can be deployed quickly and will most effectively reach all occupants. Shorten and simplify the alerts, keep it brief and concise. The message should be ready for the FLS Directors or FLS staff to deploy at a moment's notice. FLS Directors can discuss with legal and insurance carriers to review the wording and discuss the pros and cons of the message's impact.

FLS Directors and other FLS staff also need to practice the announcement; the announcement should be made in a clear, calm voice. A strong and confident voice can help the occupants to follow direction. Repeat the announcement as many as necessary.

All announcements must be made in English. However, the FDNY recommends that the announcements may be repeated in foreign languages that the majority of the occupants of the premises speak. For example, after making announcement in English, the FLS Director of a Chinatown hotel may repeat the announcement in Chinese.

There's no single active shooter awareness message that will suffice for all building types, situations, and occupancies. You need to consider the building type and occupancies to prepare the notification scripts. The FDNY recommends the following sample scripts for several occupancies. All the scripts follow the same basic principle: Occupants always need to have a clear understanding that there is a significant threat and where the threat is (or where the threat was last seen).

Sample scripts for active shooter emergency notification in different occupancies:

- For office buildings with trained occupants:

 "Attention! Emergency! An active shooter was last seen on the 3rd floor of the building. Avoid danger. Implement the Avoid-Barricade-Confront strategy based on your location."
- For hotel occupants: (considering there might be foreigner visitors who are not familiar with "active shooter" terminology, we suggest to use "gun shots" instead of "active shooter".)

"Attention! Emergency! Gun shots are fired on the 3rd floor. Avoid danger. Move to a safe area now. Stay in your room, lock the door and get down."

• For hospital occupants:

"Attention! Emergency! An active shooter was last seen on the 3rd floor of the building. Implement the Avoid-Barricade-Confront strategy based on your location."

• For theater/stadium occupants:

"Attention! Emergency! Gun shots fired in theater 5 on the 3rd floor. Avoid danger. Move to a safe area or barricade if possible."

• For other public assembly (e.g. shopping mall) occupants:

"Attention! Emergency! Gun shots fired on the 2nd floor on the 6th Ave side. Avoid danger. Move to a safe area or barricade if possible."

Federal agencies (e.g. U.S. Department of Health and Human Services, U.S. Department of Homeland Security, U.S. Department of Justice, Federal Bureau of Investigation, and Federal Emergency Management Agency) highly recommend the use of plain language/clear text (not code words) to communicate information effectively. Sending the alert through as many delivery channels as possible is the best way to ensure awareness. The goal is to empower as many individuals as possible with the ability to make an informed decision as to their best option to maximize chances of survival.

Proper notification will allow all building occupants to choose one of the survival techniques (Avoid, Barricade or Confront) based on their own condition, location, and environment.

- Notify/consult with the FLS Brigade regarding the implementation of the emergency action plan.
- Assess the Building Components or Systems and take appropriate actions. Evaluate the building, become familiar with the systems in the building as there are many variables and each building has unique design characteristics.

Stairways and routes of egress

Evaluate the stairway(s) or other routes of egress for use. Some routes of egress or stairways may be denied or limited based on the active shooter(s) location if known. The FLS Director should be prepared to provide details to arriving first responding personnel about the status, availability and the condition of all stairways. It will be useful for the police officers to know which stairways are clear for use.

► <u>Elevator operation</u>

In an active shooter incident, the freight elevator may be the best option for the use of police officers. Freight elevators being operated manually, if safe to do so, should be advised to return to the ground level by a two-way communication device/radio with doors closed.

Unlike the required responses in other non-fire emergencies, the FLS Director will not be required to automatically recall all the elevators. Since there are many variables and each

building has unique design characteristics, we cannot recommend a universal approach towards passenger's elevator recall.

Upon arrival of the first police officer(s), the FLS Director should explain the elevator function to the arriving police officer(s) and follow their directions.

Interior doors, including fire doors

Manual activation of the fail-safe door release system will facilitate evacuation by unlocking stairway and elevator vestibule doors but keeping them in the closed position. Active shooter attacks are dynamic events; so, unlike the required responses in other non-fire emergencies, the FLS Director will not be required to automatically activate the fail-safe door release system. The last known location of an active shooter must always be considered prior to the manual activation of the fail-safe door release system. The operation of the fail safe system may be different from building to building. Buildings built in different years may comply with different applicable Building Codes. The FLS Director must include the status of the stairway (e.g. the fail-safe devices have or have not been activated) and elevator vestibule doors in the information exchange upon NYPD arrival.

Evaluate ventilation system operation

All should be assessed if it is safe to do so.

- Evaluate electrical, natural gas, steam and other utility operations
 All should be assessed if it is safe to do so.
- Evaluate fuel oil storage systems and associated pumps and piping
- ➤ All should be assessed if it is safe to do so.

Communications

- Continue to monitor the emergency.
- Maintain appropriate communication with the FLS Brigade members and building occupants.
- ➤ Maintain appropriate communication with 911 operators or emergency responders.
- ➤ If a fire alarm is activated, if safe to do so, the FLS Director should follow standard protocol and procedures of a fire emergency but proceed with extreme caution and keep the NYPD survival techniques (Avoid-Barricade-Confront) in mind.
- b. Acceptable actions: NA.
- c. Unacceptable actions: NA.

4.3.3 Interacting with Police Officers

During an active shooter emergency, the FDNY normally will not be in the building to direct the required actions. The police officers will respond to the 911 call immediately and go directly to the building. Police officers will proceed directly to the last known location of the active shooter.

The FLS Director and the FLS brigade members should expect:

- Police officers may wear regular patrol uniforms or external bulletproof vests, Kevlar helmets,
 and other tactical equipment.
- Police officers may be armed with rifles and shotguns in addition to their handguns.
- Police officers may shout commands, and may order individuals to the ground for their safety.

As an FLS Director, you are required to notify arriving NYPD, FDNY personnel and other first responders of the nature of the emergency and the actions taken up to the current time. You should also provide building information including:

- 4 sets of floor plans (3 sets for NYPD and 1 set for FDNY).
- 4 sets of Building Information Card (BIC) (3 sets for NYPD and 1 set for FDNY).
- 4 sets of Keys/Access cards (3 sets for NYPD and 1 set for FDNY).
- Fully charged Premises security radios/walkie-talkies.

As an FLS Director, you may need to quickly provide the police officers with the following information, if known:

- Location of the active shooter or his/her last known location.
- Number of shooters, if more than one.
- Physical description of shooter(s).
- Name/identity of the shooter(s) (e.g. employee).
- Number and type of weapons held by the shooter(s).
- Number of potential victims at the location.
- The special design of the building (are there open space interior partition materials, etc.)
- Unique tenants (high profile occupants, political officials, armed security, or disabled person, etc.)
- If explosions were heard.

The police officers may request the FLS Director and/or FLS brigade members to operate and control the building systems to assist in isolating the shooter. It is critical for the FLS Director and/or FLS brigade members to follow orders of the police officers.

Remember that the first police officers to arrive on the scene may not stop to help injured persons. Expect teams comprised of additional officers and emergency medical personnel to follow the

initial responding officers. These teams will treat and remove any injured persons from the areas that have been cleared by the first responding police officers. They may also call upon able-bodied occupants to assist in removing the wounded from the premises.

5. LITHIUM-ION BATTERY SAFETY

Lithium-ion safety

Lithium-ion batteries are rechargeable batteries found in electric bikes, scooters, cars, laptops, tablets, phones, and many other common household devices.

Lithium-ion battery fires have caused deaths, serious injuries, and devastating damage to property around the city. It's important to follow rules for safe storage, charging, and disposal for these types of batteries.

If you own a lithium-ion powered device or plan to buy one, the FDNY has important safety tips that you should follow. These tips apply to all devices powered by lithium-ion batteries, including phones, tablets, laptops, e-cigarettes, toys, high-tech luggage, and even robotic vacuum cleaners.

Immediately stop using or charging battery and call 911 if you notice:

- Fire or Smoke
- Overheating
- Odd noises
- Leaking
- Change in color or shape
- Strange smell

ALWAYS:

 purchase and use devices certified by a Nationally Recognized Testing

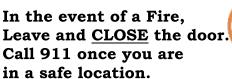
Laboratory (NRTL).



- follow the manufacturer's instructions for:
 - charging and storage.
 - correct battery, cord, and power adapter
- keep exit path clear at all times.
- plug directly into a wall electrical outlet for charging.
- keep batteries and devices at room temperature.
- store and/or charge batteries away from anything flammable.
- keep away from heat sources.
- bring batteries to a NYC Battery Recycling Center. Visit nyc.gov/batteries for more information.

NEVER:

- use aftermarket batteries or chargers.
- use damaged or altered batteries
- plug into a power strip or overload an outlet.
- overcharge or leave battery charging overnight.
- charge a battery or device under your pillow, on your bed, or near a couch.
- leave e-bikes or e-scooters unattended while charging.
- block your primary way in or out of a room/space with e-bikes, escooters, wheelchairs, etc.
- place batteries in Trash or Recycling bin. It is ILLEGAL. Visit nyc.gov/batteries for disposal locations and information.





Charging Lithium Ion

Lithium-ion batteries do not have to be fully charged; partial charge is the most suitable.

When **charging more than five (5)** personal mobility devices or their removable batteries, it must be in a **dedicated room with ventilation** and a self-closing door.

For a total battery capacity of 20 kilowatt-hours (kWh), a 2-foot separation between charging batteries is required. For a total battery capacity up to 50 kWh, a 3-foot separation is needed.

Chargers must only be used with a compatible battery pack. The original equipment manufacturer (OEM) charger interplays with the battery pack using the battery management system (BMS). The wrong battery/charger combination may not work safely. For example, the 100% cutoff to prevent overcharging, which damages batteries, may not work which can easily create hazardous conditions such as fires, explosions and/or injuries.

Always check with the manufacturer or retailer of the personal mobility device, an authorized repair shop or a testing laboratory such as Underwrites Laboratories (UL) to see if replacement is recommended or listed and safe for use with that device. Using unauthorized parts, including batteries and/or chargers, may cause damage, fire and possibly void your warranty.

Extinguishing Lithium-ion

Water may not prevent a battery from burning and spreading. Battery cells are known to explode and quickly spread to another battery. It can spread to another devices.



Fire Extinguishers

do not work

on lithium-ion batteries fires.

Unexpected Re-ignition.

Reignition is common. Lithium-Ion Batteries are known to unexpectedly re-ignite (without warning) minutes, hours and even days after all visible fire has been put out.

Lithium-ion batteries can enter an uncontrollable, self-heating state. This can result in the release of gas, cause fire and possible explosion.

These batteries may continue to generate heat even when there is no visible sign of fire. Once heat reaches a certain level fire may reignite on the battery and surrounding area.

