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Table of Contents

PART III. NON-FIRE EMERGENCY SAFETY TRAINING

13. APPLICABLE LESSONS FROM 911 WORLD TRADE CENTER ATTACKS

(This section was cited from NIST NCSTAR 1, 2005, Federal building and fire safety investigation of the world trade center disaster report. "Final Report on the Collapse of the World Trade Center Towers. http://ws680.nist.gov/publication/get_pdf.cfm?pub_id=909017)

The September 11 attacks were a series of terrorist attacks on September 11, 2001. Four passenger airliners were hijacked by al-Qaeda terrorists. Two of the planes were crashed into the North and South towers, respectively, of the World Trade Center complex in New York City. Both buildings collapsed within 2 hours with debris and the resulting fires causing partial or complete collapse of all other buildings in the World Trade Center complex. The attacks took the lives of nearly 3,000 people and injured over 6,000 others.

In 2005, the National Institute of Standards and Technology (NIST) released a final report on the collapsed of the World Trade Center Towers. Some recommendations from the NIST report regarding to fire alarm panel, communication system, and building evacuation issues are listed below:

- **Fire alarm panel and communication system:**

The NIST recommends that fire alarm and communication systems in buildings be developed to provide continuous, reliable, and accurate information on the status of life safety conditions at a level of detail sufficient to manage the evacuation process in building fire emergencies; all communication and control paths in buildings need to be designed and installed to have same resistance to failure and increased survivability above that specified in present standards.

The NIST also recommends the inspection and testing of emergency communication system, radio communications and associated operating protocol to ensure that the systems and protocols: (1) are effective for large-scale emergencies in buildings with challenging radio frequency propagation environments; and (2) can be used to identify, locate, and track first responders within indoor building environments and in the field.

- **Building evacuation**

The building owner and staff should develop and carry out training education to improve building occupants' preparedness for evacuation in case of building emergencies. For example they should be familiar with the egress route. The egress systems should be provided with consistent layouts and standard signage and guidance so that systems become intuitive and obvious to building occupants during evacuations. The laws should not discourage building occupants from familiarizing themselves with the detailed layout of egress routes.

14. NON-FIRE DRILLS

14.1 Types of non-fire drills

Non-fire drills shall consist either of instruction or stairwell familiarization, as follows:

14.1.1 Instructional drills

Such drills shall serve to familiarize building occupants with the requirements and procedures of the Comprehensive Fire Safety Emergency Action plan by means of informational sessions approved by the FLS Director. Such sessions shall address implementation of the Comprehensive Fire Safety Emergency Action plan both during regular business hours and at other times, when FLS wardens and other FLS staff may be absent from the building.

14.1.2 Stairwell familiarization drills

Such drills shall serve to familiarize building occupants with the process of in-building relocation or building evacuation via building stairwells. A stairwell familiarization drill shall require building occupants to enter a building stairwell and be escorted down at least four (4) floors of stairs (or to ground level, if below the fifth floor) during which time stairwell safety features and safe evacuation procedures shall be reviewed. During the required stairwell familiarization drill highlight any unusual features of the stairwells (such as in-stairwell horizontal passageways).

14.2 Qualifications, timing, frequency and participation

A non-fire drill conducted for purposes of compliance with Fire Code must be conducted by a person holding a Certificate of Fitness as an FLS Director, FEP Coordinator, or Drill Conductor. A non-fire drill conducted by a Drill Conductor in a building or occupancy requiring an FLS Director or FEP Coordinator must be conducted under the personal supervision of such FLS Director or FEP Coordinator. The non-fire drill must be conducted through live instruction. The drill may be at any appropriate location, including but not limited to stairwell entrances or in-building relocation areas.

The non-fire drills must be scheduled to maximize the participation of required drill participants. Drills must be scheduled in a manner that best assures the participation of regular building occupants. Drills may be conducted on different work shifts and/or during non-business hours to facilitate the participation of building occupants. Office buildings and other buildings with Comprehensive Fire Safety and Emergency Action Plans accepted for filing by the Department must continue to conduct separate fire and non-fire emergency (emergency action plan) drills on separate dates.

The frequency of non-fire drills and the building occupants required to participate, must be as set forth in the following:

1. At least two non-fire drills must be conducted **within one year of the date of Fire Department acceptance of the building's initial Comprehensive Fire Safety and Emergency Action Plan**, the first of which shall be conducted within six months of such date of acceptance. At least one (1) of these initial non-fire drills must involve stairwell familiarization.
2. Beginning one year from the date of department acceptance of the building's plan: During the required stairwell familiarization drill highlight any unusual features of the stairwells (such as in-stairwell horizontal passageways) plan, a non-fire drill shall be conducted on each floor of the building at least once a year. A non-fire drill involving stairwell familiarization shall be conducted at least once every three years.

14.3 Presentation requirements and techniques

Refer to the fire drill section of this booklet (Section 10.2 of Component 1 Booklet)

14.4 Persons with special needs

Refer to the fire drill section of this booklet (Section 10.3 of Component 1 booklet)

14.5 General content of all drills

Refer to the fire drill section of this booklet (Section 10.4 of Component 1 booklet)

14.6 Content of non-fire drills

The presenter shall state that the drill is being conducted to educate building occupants about the actions they should take in the event of a non-fire emergency. The presenter specify which non-fire emergencies will be addressed in the drill and provide examples.

When conducting a non-fire emergency drill (also known as emergency action plan drill), the presenter must communicate the following information to the building occupants with respect to non-fire drills:

14.6.1 General information

When conducting a non-fire emergency drill (also known as emergency action plan drill), the presenter shall communicate the following information to building occupants:

(1) Examples of the different types of non-fire emergencies.

(2) The process by which building occupants will be notified of a non-fire emergency differs from a fire. If applicable, explain that separate and distinct inquiry tones or other alarm tones will sound for a non-fire emergency, and describe or demonstrate the different sounds.

(3) How building occupants should respond to non-fire emergencies may be different from the response to a fire.

(4) There are four basic responses to an emergency in a building: sheltering in place in the building; relocation within a building; evacuation of all of the occupants from the building; and evacuation of some but not all building occupants. Reference may be made to the acronym "TIPS" (Total evacuation, In-building relocation, Partial evacuation, and Sheltering in place).

(5) The best response to a non-fire emergency may not be evacuation but sheltering in place or relocating within the building.

(6) Specific protocols have been developed in response to medical emergencies and active shooter emergencies (refer to Section 14.6.5 for medical emergencies and Section 18.2.2 for active shooter emergencies).

14.6.2 Methods of notification

The presenter shall explain to building occupants how they will be notified of non-fire emergencies in the building or occupancy:

(1) Identify and describe the manner in which such notifications will be made.

a. If notification is made by means of the fire alarm system's inquiry tone, distinguish the non-fire emergency notification tones from the auditory and visual alerts (fire alarm tones and strobe lights) that are used to notify building occupants of a fire.

b. If notification is made by means of a fire alarm system with voice communication capability, or public address system, verbal announcements must be made by a member of the emergency preparedness staff who holds a Department certificate of fitness.

c. Identify and describe any other means by which building occupants will be notified of a non-fire emergency, such as e-mails and texts.

(2) Encourage building occupants themselves to subscribe to and monitor a public notification system such as Notify NYC.

(3) Emphasize that the fire alarm system's manual pull stations are not to be used during an active shooter emergency or to notify others of any other non-fire emergency, as it may cause building occupants to enter the stairwells and/or evacuate the building when they should be sheltering in place.

14.6.3 Means of Egress

Identify all of the means of egress in the building or if the presentation is limited to occupants on a particular floor or area of the building, all the means of egress available on that floor or in that area, and any other areas that the building occupants on that floor or may regular access.
Identify any access stairs between floors, describing and/or illustrating their location and the floors that they connect.
Advise building occupants to follow the direction of the emergency preparedness staff before using the elevators during a non-fire emergency, as it may be necessary to shut down the elevators in certain circumstances. If elevator use is authorized, and building occupants are instructed to evacuate the building, priority will be given to persons who have functional needs and require assistance in evacuating from or relocating within the building.

14.6.4 Specific information

For each non-fire emergency addressed in the drill the presenter must:

(1) explain the response that the building's emergency preparedness staff have been trained to implement or may choose to implement, and why;

(2) indicate whether elevators will be available for evacuation and how they will be used;

(3) with respect to medical emergencies that require an emergency ambulance response and transport to a hospital, explain that specific procedures have been developed to facilitate a Fire Department EMS response to the patient, as set forth in the Section 14.6.5 of this booklet, and explain those procedures or provide a handout describing the procedures and advise drill participants to familiarize themselves with them; and

with respect to active shooters, emphasize that building occupants should exercise their best judgment in responding to such an emergency, but describe the actions that the building or occupancy recommends to its staff and occupants. The Fire Department's recommended response to an active shooter emergency is set forth in the Section 18.2.2 of this section. If the building utilizes these recommended procedures, it is recommended that a handout describing the procedures be distributed to drill participants. With respect to active shooters, emphasize that building occupants should exercise their best judgment in responding to such an emergency, but describe the actions that the building or occupancy recommends to its staff and occupants. Specific protocols have been developed in response to active shooter emergencies. The protocols should be referred to Chapter 18 of this booklet.

14.6.5 Medical Emergencies

Emergency preparedness staff and drill conductors presenting *non-fire emergency* drills shall instruct building *occupants* in the following procedures in the event of a medical emergency requiring emergency medical care and transport to a hospital:

- **Call 911**. When notifying New York City 911 of a medical emergency requiring emergency medical care and transport to a hospital, include the following information:
  - The name of the building or occupancy.
  - The address of the appropriate building entrance or other location at which emergency responders will be met by FEP staff and the nearest cross-street location.
  - The number of patients and their exact location inside or outside of the building.
  - The patient's chief complaint and/or present condition (e.g. bleeding, breathing/not breathing, conscious/unconscious, etc.)
- **Call building emergency notification number.** After calling 911, notify the emergency preparedness staff of the building or occupancy (using a warden phone if convenient) or the building office designated to receive notification of emergencies on the premises. This will alert them to assist emergency responders upon their arrival. The emergency preparedness staff should meet the emergency responders, hold an elevator for their use, escort them to the patient, and facilitate removal of the patient.
- **Know location of defibrillator.** Building occupants should be familiarized with the location of defibrillators or other medical equipment that may be needed in the event of a medical emergency.
- **Stay with patient.** Building occupants should be advised that someone should remain with patient. However, the victim/patient should not be moved by untrained personnel unless the victim/patient's location is unsafe.
- **CPR volunteer response.** If there are persons trained in cardio-pulmonary resuscitation (CPR) who wish to volunteer to respond to medical emergencies on the premises, notify the FLS staff of the building or occupancy.

14.6.6 Full building evacuation drills

Full building evacuation drills for non-fire emergency, in which all building occupants evacuate the building, are not required according to the 2008 Fire Rule (404-02(l)(4)) and are not mentioned in the 3 RCNY 401-07 "Fire and Non-Fire Emergency Drills".

15. 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 have sufficient information to dictate that the FDNY plan should be immediately implemented, he or she has have 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.

15.1 Required non-fire emergency actions

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

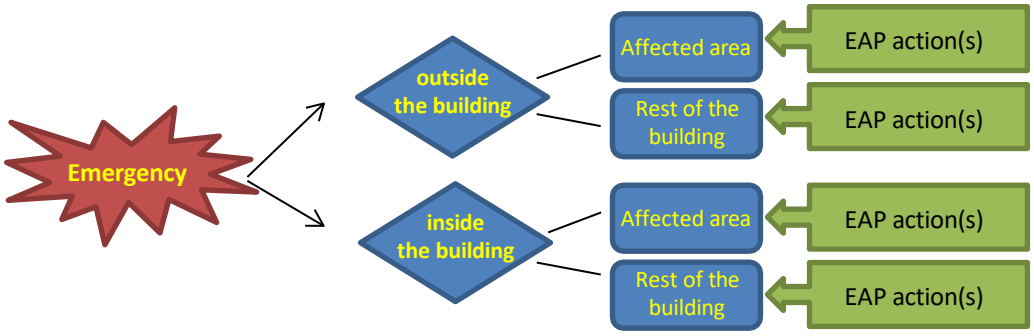
- The FLS Director should immediately report to the Fire Command Center. The Fire Command Center should be used for command, communication and control of the emergency.
- Immediately call 911 to report (1) any emergency situation and (2) any determination to implement the Plan and which non-fire emergency 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 17 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
    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
    - <u>Egress from entrances/exits and stairways</u>
      The access/egress might be denied or limited based on different emergencies.
    - <u>Elevator operation</u>
      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 18 of this booklet).
    - <u>Evaluate ventilation system operation</u>
      Take appropriate actions.
    - <u>Windows</u>
      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.
    - <u>Interior door, including fire doors</u>
      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 18 of this booklet).
    - <u>Evaluate electrical, natural gas, steam, and other utility operations</u>
      All should be assessed. The shut-off valve should be indicated in the Plan of the building.
    - <u>Evaluate fuel oil storage systems and associated pumps and piping</u>
      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.

15.2 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.

15.2.1.1 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.

15.2.2 In-building relocation

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 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.

Included in the statement 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). The 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.

15.3 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.

15.4 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 air-conditioning 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 to 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.

15.5 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.

15.5.1 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.

15.5.2 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) Increase the indoor-outdoor air exchange rate as soon as the hazardous plume **has 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.

15.5.3 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.

15.5.4 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.

15.5.5 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.

15.6 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 in-building relocation must be provided with **two-way voice communication** to the Fire Command 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.

15.7 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.

15.8 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 at the Wisconsin EMS

Association Working Together conference, 2017. **https://www.slideshare.net/romduck/situational-awareness-for-fire-and-ems**

2. 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 you, as an FLS Director, 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.

16. NON-FIRE EMERGENCY INCIDENTS

16.1 Hazardous material incidents involving chemical, biological, or radiological (CBR) agents

(This section is cited from the following resources:

1. Responding to a Biological or Chemical Threat: A Practical Guide, Bureau of Diplomatic Security of U.S. Department of State, 2001. http://www.state.gov/m/ds/rls/rpt/20214.htm
2. Biological Attack Fact Sheet: Human Pathogens, Biotoxins, and Agricultural Threats. A fact sheet from the National Academies and the U.S. Department of Homeland Security, 2004. http://www.dhs.gov/biological-attack-what-it
3. Health Effects from Chemical, Biological and Radiological Weapons. Department of Veterans Affairs, 2003. http://www.publichealth.va.gov/docs/vhi/chem_bio_rad_weapons.pdf)

16.1.1 The CBR agents

A hazardous materials (HAZMAT) incident is a situation in which harmful substances are released into the environment. These types of releases are often classified as chemical, biological, and radiological (CBR). The cause of a release can be either accidental or intentional. Accidental incidents may result from human error, tainted food products, technological failure, or a natural disaster and may include spills, leaks, airborne releases, or seepage into uncontained areas. Asbestos released during building demolition or collapse, oil spills or raw sewage releases are some examples.

Intentional releases of hazardous materials include criminal acts such as purposeful dumping by industries to avoid regulatory requirements or terrorist acts that target a specific location and may involve the use of a dispersal device or explosive. Whether accidental or intentional, the impacts of a CBR event will vary according to the release scenario, the agent type and its physical properties, the weather conditions, the topography of the area, and the potential for indirect transmission and cross-contamination.

16.1.2 Historic occurrences in New York City.

Date	Event /Substance	Location	Description
08/07/1980	Liquefied petroleum gas	Manhattan	• A Ritter truck carrying 9,000 gallons of liquefied petroleum gas leaks on the George Washington Bridge traveling from New Jersey to New York City • Bridge cleared for 8 hours out of fear of an explosion, creating massive traffic jam
09/02/1986	Cyanide (intentional)	Manhattan	• 21 injured when cyanide is released in Metropolitan Opera
08/24/1989	Asbestos	Manhattan	• Steam pipe explosion results in evacuation of Gramercy Park area in Manhattan after discovery of "extremely high" levels of asbestos
09/18/2001	Anthrax (intentional)	Manhattan	• Letters sent to various media offices in New York City contain anthrax spores • Part of larger coordinated attack that also infects people in other cities and states • 5 people killed, 17 others infected (not all in New York City)

Date	Event /Substance	Location	Description
12/03/2004	Chlorine	Bronx	• An SUV collides with a tractor-trailer carrying barrels of chlorine on the Cross Bronx Expressway, causing chlorine to leak onto the roadway • 3 firefighters and 2 police officers are exposed to high levels of chlorine and treated at the hospital
07/18/2007	Asbestos	Manhattan	• Steam pipe explosion with asbestos found in the debris
08/15/2010	Hydrogen peroxide	Manhattan	• Spill in a high-rise building due to machine malfunctioning releases about 30 gallons hydrogen peroxide
07/20/2011	Raw sewage	Citywide	• Four-alarm fire at North River Wastewater Treatment Plant on the Hudson River and 135th Street in Manhattan • 15 to 20 million gallons of raw sewage released into Hudson River • Forced closure of 3 beaches in Staten Island and 1 beach in Brooklyn due to high levels of harmful bacteria in the water • DEP treats water with chlorine to reduce concentration of bacteria
10/29/2012	Release of various hazardous substances during Hurricane Sandy	Citywide	• 10 of 14 DEP wastewater treatment plants are damaged or lose power, releasing approximately 560 million gallons of untreated sewage mixed with stormwater into local waterways • Floodwaters contain numerous other toxic substances such as oil, household chemicals, pesticides, and industrial pollutants
10/22/2013	Oil spill	Manhattan	• Approximately 50 gallons of home heating oil spill into the street at West 36th Street and 7th Avenue in Manhattan • 3 people are contaminated and treated on-scene
10/21/2015	Ammonia leak	Brooklyn	• An ammonia leak at the Prospect Park skating rink sent nine firefighters and one other person to the hospital for minor inhalation problems. • The leak spread a strong smell throughout the neighborhood and park.

16.1.3 Characteristics of chemical warfare agents and biological agents

(1) Chemical

A chemical is generally considered hazardous if it exhibits toxicity, reactivity, corrosive hazard, or flammability. The chemical properties of these substances are such that they can react with and cause damage to living cells and tissue. Exposure pathways include inhalation, skin contact, eye contact, ingestion or injection. Commercially or industrially used hazardous chemicals (also known as Toxic Industrial Chemicals\Materials–TICs\TIMs) that may be released accidentally include petroleum substances (such as oil, gasoline, and liquid natural gas) and those with industrial applications (such as chlorine and pesticides).

Chemical agents are generally liquids, often aerosolized, and most have immediate effects or are delayed for a few hours. Many chemical agents have a unique odor and color.

Chemical warfare agents (released intentionally) are often classified according to their effect on the body, based on the primary organ system affected by exposure. Nerve agents (e.g., sarin, VX, and VR) enter the body through the skin or lungs and affect the central nervous system. Blood gases or systemic agents (e.g., hydrogen cyanide) enter the bloodstream either directly or indirectly and are transported systemically throughout the body. Respiratory agents (e.g., chlorine, phosgene) are inhaled and can cause damage to the lungs. Blister agents (e.g., mustard gas, lewisite) burn the skin, causing unsightly blisters on the skin and if

they get absorbed they can also affect other parts of the body. Depending on the severity of exposure, impacts may include temporary illness or injury, permanent medical conditions, or death.

Historical chemical attacks

- ***The Ghouta chemical attack occurred in Ghouta, Syria.***

On 08/21/2013, Ghouta was struck by rockets containing the chemical warfare agent sarin. Estimates of the death toll range from at least 281 people to 1,729.

- ***The Khan Shaykhun chemical attack occurred in Khan Shaykhun, Syria.***

On 04/04/2017, the town was reported to have been struck by a heavy airstrike by government forces followed by massive civilian chemical poisoning. The release of the toxic gas, which included sarin, or a similar substance, killed at least 74 people and injured more than 557.

(2) Biological

Biological hazards include toxins or disease-causing microorganisms and pathogens, such as bacteria and viruses. The distinguishing characteristic of these substances is their ability to multiply within a host (e.g. humans etc.) and cause an infection. Some bacteria and viruses can be spread, or transmitted, from one individual to another. Infections typically occur as a result of airborne exposure, skin contact, or ingestion. In general, exposure to bacteria and viruses can occur through inhalation (as is the case with airborne Bacillu anthracis spores, which cause anthrax), ingestion of contaminated food or water (the case with E. coli, which causes gastrointestinal infection), contact with infected individuals, or contact with contaminated surfaces.

The method of transmission can have a significant impact on the spread of infection among a population. Some infections may be transmitted only by direct physical contact between individuals or contact with contaminated materials or surfaces.

Biological agents differ in that the effects are delayed, often for days. The effects of toxins, such as botulinum toxin, occur typically in less than a day. Living biological agents, such as anthrax or plague, generally take 2-5 days for symptoms to appear. Biological agents have no odor or color and can be in either liquid or powder form.

Although food or water contamination or absorption through the skin are possible attack routes, most experts agree that inhalation of chemical or biological agents is the most likely and effective means. Protection of breathing airways is therefore the single most important factor in a situation where chemical or biological agents may be present. In all cases, medical attention should be sought immediately, even if exposure is thought to be limited.

Historical biological incidents

- ***Norovirus breakout in Redwood City upscale hotel , CA***.

On October 26, 2014, 127 conference members became ill after eating banquet dinner at Redwood City's Hotel Sofitel. Many people projectile vomited in the lobby and had to be rushed to the hospital. It was confirmed that it was caused by norovirus.

16.1.4 Characteristics and effects of radiological dispersal devices (RDD) / Dirty bombs

With the end of the Cold War, the possibility of battlefield use of nuclear weapons appears diminished, although not eliminated. The possibility of terrorists obtaining nuclear weapons is disturbing, but probably unlikely given the enormous difficulty of obtaining the necessary components and underlying critical technology required to make a nuclear weapon. However, a much simpler radiological dispersant device or "dirty bomb" is an all too plausible terrorist scenario.

A **"dirty bomb"** is one type of RDD that uses a conventional explosion to disperse radioactive material over a targeted area. The "dirty bomb" combines a radioactive material with a conventional explosive to disperse

it. The radioactive material could potentially come from many sources, such as radioactive waste, or hospital or engineering radiation sources. The "dirty" term refers to the potential widespread radiological contamination that would follow exploding the bomb and the resultant dispersal of radioactive material. The term dirty bomb and RDD are often used interchangeably in technical literature. However, RDDs could also include other means of dispersal such as placing a container of radioactive material in a public place, or using an airplane to disperse powdered or aerosolized forms of radioactive material.

It is very difficult to design an RDD that would deliver radiation doses high enough to cause immediate health effects or fatalities in a large number of people. Therefore, experts generally agree that an RDD would most likely be used to contaminate facilities or places where people live and work, disrupting lives and livelihoods and causing anxiety in those who think they are being, or have been, exposed.

Radiation can be readily detected with equipment carried by many emergency responders, such as Geiger counters, which provide a measure of radiation dose and rate. Other types of instruments are used to identify the radioactive element(s) present known as isotopes.

Most dirty bombs and other RDDs would have very localized effects, ranging from less than a city block to several square miles. For example, if the material is dispersed as fine particles, it might be carried by the wind over a relatively large area.

Most injuries from a dirty bomb would probably occur from the heat, debris, radiological dust, and force of the conventional explosion used to disperse the radioactive material, affecting only individuals close to the site of the explosion. At the low radiation levels expected from an RDD, the immediate health effects from radiation exposure would likely be minimal. The health effects of radiation tend to be directly proportional to radiation dose.

Psychological effects from fear of being exposed may be one of the major consequences of a dirty bomb. Unless information about potential exposure is made available from a credible source, people unsure about their exposure might seek advice from medical centers, complicating the centers' ability to deal with acute injuries.

16.1.5 The differences between chemical, biological or radiological agents:

Agents	Chemical Agents	Biological Agents	Radiological agents
Makeup	• Man-made. • Large-scale, cheaper, industrial production	• Natural origin. • Difficult, costly, small-scale production	• Man-made. • Easy to make small DDRs, but hard to design one with high dose radiation.
Appearance (In general)	Noticeable odor or taste	Odorless and tasteless	Not recognizable by the senses, and are colorless and odorless
Effects	• The response normally is immediate (few seconds to a few minutes), but some might not be detected for hours. • Crisis may persist for hours or days	• The response may be delayed, could be undetected for hours, days, or potentially weeks. • Crisis may persist for weeks or months	• The onset of symptoms requires days to weeks and there typically will be no characteristic signatures. • Because of the delayed onset of symptoms, the affected area may be greater due to the migration of contaminated individuals.

16.1.6 Contamination issue

Transmissibility (or contamination) is one of the key properties that CBR agents in common. CBR agents can be introduced into water, air and soil or even be transmitted from one person to another. Indirect exposure or cross contamination to CBR agents after their release and dispersal may occur via:

- person-to-person transmission of CBR agents by contact with contaminated clothing, objects, and surfaces, or through skin contact
- person-to-person transmission of disease or illness caused by biological agents
- re-suspension in the air of CBR agents that have been widely dispersed on the ground, thus increasing the likelihood of their inhalation or ingestion
- transfer of CBR agents by exposed persons, or transport of material from affected to unaffected areas, causing cross-contamination.

16.1.7 Basic responses

Hazardous materials release including biological, chemical and radiological materials pose a serious risk if not promptly and properly responded to by the individuals who initially identify the spill and the appropriate emergency response staff.

The best defense to prevent further causalities from CBR agents is using the fundamental principles of contamination avoidance. Avoiding contamination requires the ability to recognize the presence or absence of CBR hazards in the air; on water, land, personnel, equipment, and facilities; and at short and long ranges. Surveillance and detection capabilities enable forces to recognize CBR hazards.

Contamination and exposure can be minimized by doing the following:

(1) Limiting the duration of exposure by reducing the amount of time in the hazardous area

(2) Delaying entry time until radiation decays enough to permit safe passage or occupancy or both

(3) Avoiding and bypassing contaminated areas

(4) Operating the HVAC system properly (refer to Section 15.4 of this booklet)

In addition to the required basic procedures, the FDNY recommends that additional procedures for CBR releases should include:

(1) Evacuate the spill area. Provide assistance including the use of safety showers and eyewashes. Seek emergency medical assistance once properly decontaminated.

(2) Confine the spill area by closing the nearest doors to the spill area. Isolate contaminated persons in a separate room outside the spill area and attempt to minimize the spread of the contamination.

(3) Secure the area until emergency response personnel arrive to ensure no one enters the spill area. If area has multiple entrances, be sure to locate staff at all entrances to prevent entry.

16.2 Bombs, bomb threats and suspicious packages

(This section is cited from the following resources:

1. Plan Ahead for Disasters: Explsions. Ready.gov. **https://www.ready.gov/explosions**
2. Are You Ready? An In-depth Guide to Citizen Preparedness. FEMA, 2004. **https://www.fema.gov/pdf/areyouready/areyouready_full.pdf**
3. Bomb Threat and Suspicious Package Management, Office of Homeland Security, 2015. **https://www.tn.gov/assets/entities/safety/attachments/Bomb_Threat_and_Suspicious_Package_Management.pdf**)

16.2.1 The threat

(1) Bombs or explosive devices

Bombs or explosive devices are common weapons of terrorism. Explosive devices can be highly portable, using vehicles and humans as a means of transport. They may be easily detonated from remote locations or by suicide bombers. Conventional bombs have been used to damage and destroy financial, political, social, and religious institutions. Attacks have occurred in public places and on city streets.

(2) Bomb threat

Bomb threats are most commonly received via phone, but are also made in person, via email, written note, or other means. Different from real bombers who want to cause catastrophic damage , the bomb threat makers may focus more on making people fearful and disrupting the business. Fortunately, the majority of bomb threats and hazardous material threats are false. However, we cannot always assume that they will be false for every bomb threat. The FLS Director must take it seriously and notify 911 immediately.

(3) Suspicious packages

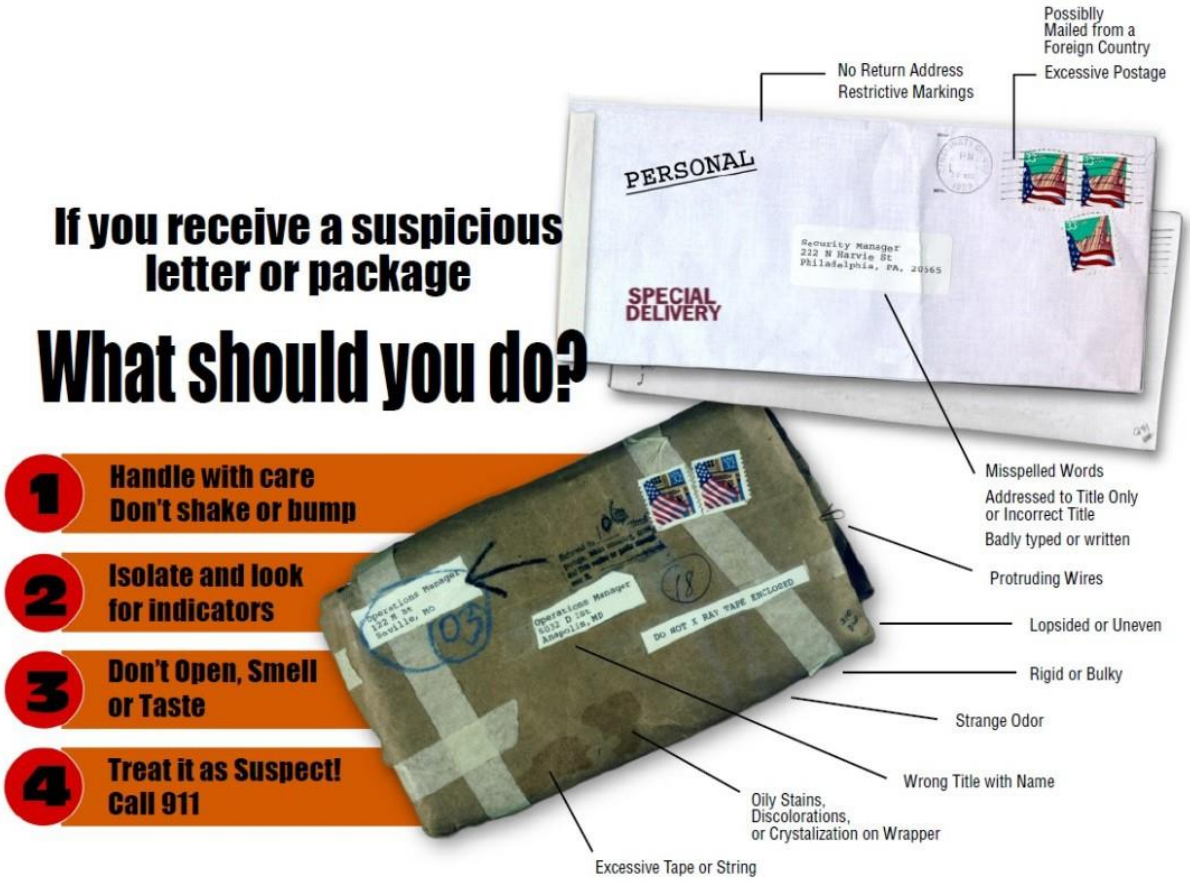
U.S. Department of Homeland Security suggests some indicators to identify suspicious packages:
One indicator of a suspicious package or piece of mail includes **inappropriate or unusual labeling**, such as:

- Excessive postage
- Misspelled common words
- No return address or strange return address
- Unusual addressing, such as not being addressed to a specific person or the use of incorrect titles or titles with no name
- Restrictive markings, such as “personal,” “confidential,” or “do not x-ray”

Other indicators include an **unusual or inappropriate appearance**, including:

- Powdery substances felt through or appearing on the item
- Oily stains or discolorations on the exterior
- Strange odors
- Excessive packaging material, like tape or string
- Lopsided or bulky shape of envelopes or boxes
- Ticking sounds, protruding wires, or exposed aluminum foil

The FBI provides graphic examples for suspicious packages:



16.2.2 History of bombings and attempts in the US

Date	Event	Location	Description
May 16, 1981	A bomb exploded	Queens, NYC	• A bomb explodes in a men's bathroom at the Pan Am terminal at New York's Kennedy Airport, killing a man. • A group calling itself the Puerto Rican Armed Resistance claims responsibility.
Nov. 7, 1983	A bomb exploded	Washington, D.C.	• A bomb blows a hole in a wall outside the Senate chamber at the Capitol in Washington. No one is hurt.
Feb. 26, 1993	A bomb in a van exploded	Manhattan, NY	• A bomb in a van explodes in the underground World Trade Center garage in New York City, killing six people and injuring more than 1,000.
April 19, 1995	A truck bomb exploded	Oklahoma, OK	• A truck bomb parked outside the Murrah Federal Building in Oklahoma City kills 168 people and injures more than 500. It is the deadliest U.S. bombing in 75 years.
July 27, 1996	A bomb exploded	Atlanta, GA	• A bomb explodes at Centennial Olympic Park in Atlanta during the Summer Games, killing two people and injuring more than 100.
Jan. 20, 1998	A bomb exploded	Birmingham , AL	• A bombing at an abortion clinic in Birmingham, Ala., kills one guard and injures a nurse.

Dec. 25, 2009	Attempted use of a weapon of mass destruction	Airline heading from Paris to Detroit	• The so-called "underwear bomber is subdued by passengers and crew after trying to blow up an airliner heading from Paris to Detroit using explosives hidden in his undergarments.
May 1, 2010	Attempted to detonate an explosives-laden SUV	Manhattan, NY	• A man leaves an explosives-laden SUV in New York's Times Square, hoping to detonate it on a busy night. Street vendors spot smoke coming from the vehicle and the bomb is disabled.
Jan. 17, 2011	Attempted use of a weapon of mass destruction	Spokane, WA	• A backpack bomb is placed along a Martin Luther King Day parade route in Spokane, Washington, meant to kill and injure participants in a civil rights march, but is found and disabled before it can explode.
April 15, 2013	Two bombs exploded	Boston, MA	• Two bombs explode in the packed streets near the finish line of the Boston Marathon, killing two people and injuring more than 80.
September 17-18, 2016	One bombings and three attempts	Seaside Park and Elizabeth, NJ; Manhattan, NY	• On 9/17, a pipe bomb exploded in a trash can along the route of a United States Marine Corps charity run in Seaside Park. No one was injured. • On 9/17, a homemade pressure cooker bomb exploded on West 23rd Street in the Chelsea neighborhood of Manhattan. Thirty-one civilians were injured. • On 9/17, a second pressure cooker bomb, with wires and a mobile phone attached, was discovered by authorities on West 27th Street of Manhattan, four blocks away from the first pressure cooker bomb. • On 9/18, multiple bombs were discovered inside a suspicious package at the Elizabeth train station.
October 3, 2016	A pipe bomb was found inside vehicle	Lafayette, TN	• A pipe bomb was found during a traffic stop Monday night in Lafayette, Tennessee. • The two men, who allegedly made the device, claimed they did not know it was illegal.
Jan to Mar, 2017	Bomb threats	Nationwide	• Months-long series of bomb threats targeting Jewish community centers. Fourteen centers in 10 states of US plus a Canadian province received threats • The bomb threats forced the evacuations of the Jewish institutes.

16.2.3 Basic responses

(1) Bombs

If there is an explosion inside the building, the building occupants should:

- Get under a sturdy table or desk if things are falling around them. When things stop falling, leave quickly, being cautious of weakened floors and stairways. As occupants exit from the building, be especially watchful of falling debris.
- Leave the area as quickly as possible. Do not stop to retrieve personal possessions or make phone calls.
- Do not use elevators.

Once building occupants are out:

- Do not stand in front of windows, glass doors, or other potentially hazardous areas.
- Move away from sidewalks or streets to be used by emergency officials or others still exiting the building.

(2) Bomb threat

• If the bomb threat is made via phone, get as much information as possible. Keep the caller on the line and record everything that is said.

• Call 911 and notify the FLS Director and the building management.

(3) Suspicious packages

When a suspicious package/item is discovered, the following procedures are recommended:

- Report the location and an accurate description of the object to 911.
- Identify the danger area, cordon off, and evacuate a clear zone of at least 300 feet, including floors below and above the object.

If you suspect that the suspicious package may contain a hazardous material type substance (example: ricin, anthrax, etc.)

- Leave the mail or package where it was found. Do not disturb. Do not try to clean the substance.
- Do not touch, taste, smell, or try to identify the substance.
- Clear the immediate area of all persons and keep others away.
- Cordon off the immediate area.
- Instruct people to wash hands and other exposed skin with soap and water, if a wash station is in the immediate area.
- Isolate exposed persons to a designated area away from the substance – but nearby, in order to limit any further contamination of your facility – and await further instruction.
- Shut down all HVAC (heating, ventilation, air conditioning) systems and room fans, heaters, etc.
- Document the location of mail or package.
- Keep a list of the persons in the immediate area of the mail or package.
- Wait for emergency personnel to arrive and follow their instructions regarding changing of clothing and further decontamination.

16.3 Natural hazards

Natural hazards are natural events such as flood, earthquake, tornado, hurricanes, and windstorms that threaten lives, property, and other assets. Natural hazards may be predicted and they tend to occur repeatedly in the same geographical locations because they are related to weather patterns or physical characteristics of certain areas.

FLS Director, should know what their premises' risks are from natural hazards and should take precautionary measures to protect the properties and the buildings' occupants.

16.3.1 Hurricanes, storms or floods

(This section is cited from the following resources:

1. Are You Ready? An In-depth Guide to Citizen Preparedness. FEMA, 2004. **https://www.fema.gov/pdf/areyouready/areyouready_full.pdf**
2. Mitigation Assessment Team Report: Hurricane Sandy in New Jersey and New York. FEMA, 2013. **https://www.fema.gov/media-library-data/1385586488603-a4f5b6e4f1f0b415a69faacb5f2ef07f/Sandy_MAT_Ch4_508post.pdf)**

A hurricane is a type of tropical cyclone. All Atlantic and Gulf of Mexico coastal areas are subject to hurricanes or tropical storms. The Atlantic hurricane season lasts from June to November, with the peak season from mid-August to late October. Hurricanes can cause catastrophic damage to coastlines and several hundred miles inland. Winds can exceed 155 miles per hour. Hurricanes and tropical storms can also spawn tornadoes and microbursts, create storm surges along the coast, and cause extensive damage from heavy rainfall.

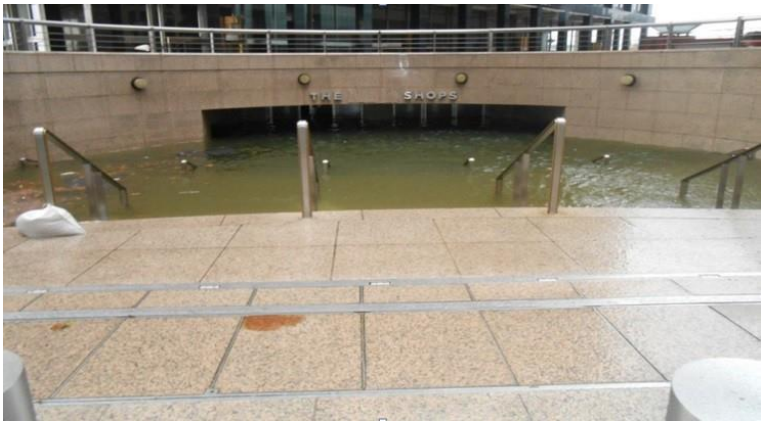
Hurricanes are classified into 5 categories based on their wind speed, central pressure, and damage potential . Category 3 and higher hurricanes are considered major hurricanes. Categories 1 and 2, however, are still considered dangerous and warrant your full attention.

Hurricane Katrina in 2005 was a Category 5 hurricane over the Gulf of Mexico, but weakened before making landfall as a Category 3 hurricane in Southeast Louisiana. It caused severe destruction. The amount of damage total more than $100 Billion.

Hurricane Sandy in 2012 was a Category 3 storm at its peak intensity when it made landfall in Cuba. While it was a Category 2 storm off the coast of the Northeastern United States, the storm became the largest Atlantic hurricane on record. At least 233 people were killed along the path of the storm in eight countries. When the storm surged NYC, it caused flooding on streets, tunnels, and subway lines and cut power.

The threats from the hurricane include storm surges (a dome of water pushed onshore by hurricane and tropical storm winds), high winds, heavy rainfall and flooding. Flash flooding, a rapid rise in water levels, caused by the hurricane can also be a major threat to low-lying coastal areas.

High-rise buildings typically are designed to have robust structural systems; however, good structural performance alone does not ensure adequate protection from flood damage. Hurricane Sandy demonstrated that mid- and high-rise buildings do not have to be severely damaged or collapse to be rendered inoperable. Flood damage was predominantly to the critical building systems (e.g. emergency power, gas installations, communications, and fire protection systems, etc.) of these structures, and the failure of these systems crippled building operations and affected thousands of occupants.



Hurricane Sandy brought the water level up over this shopping premises entrance.

Hurricane Sandy storm surge filling the concourse retail level of a Manhattan commercial high-rise building

High Water Mark (red dashed line) along first floor electrical room wall.

The water caused by Hurricane Sandy entered through the lobby doors and the loading dock of a 24-story high-rise building in Lower Manhattan . The first floor of the building was swamped with more than 4 feet of water (see the photo above). Floodwater spread through the first floor and filled the basement, primary through the elevator shaft.

The electrical service equipment located on the first floor of electrical room was all damaged. The steam distribution system, water booster pumps and other equipment in the mechanical room located in the basement were also damaged.

The images above are of a basement in an 11 story commercial and office building built in 1914. It is located on the banks of the Hudson River. The building suffered minor flood damage during Hurricane Sandy. Flood inundation was approximately 1 to 2 feet above street level. More than 40,000 gallons of fuel was stored in four tanks in the basement. The fuel tanks and pumps are inside a flood proofed enclosure. In addition, the basement has six pumps to drain the basement in case of flooding. Before the Hurricane Sandy, all six pumps were arranged to an emergency power circuit.

Based on an interview with the building's chief engineer, water initially entered the basement through a telecommunications utility point of entry on the river side of the building. The six pumps successfully controlled flood levels in the basement, keeping the water below 3 inches throughout the basement.

Generators throughout the building remained operational during the storm and after, until power service was restored by the utility provider.

FLS Directors should, properly prepare for a hurricane by, taking the following measures prior to any hurricane:

- Stay tuned to the latest hurricane updates via the radio, TV, or internet.
- Perform the hurricane hazard risk assessment. Find out if premises is in a hurricane evacuation zone by using the Hurricane Evacuation Zone Finder.
- Make plans to secure property. Hurricane winds are stronger at higher elevations. Tape does not prevent windows from breaking.
- Conduct pre-incident planning meetings with critical vendors, tenants and building staff. Ensure that the critical building systems are properly tested and additional supplies are ordered ahead. Establish an emergency hotline with the tenants.

- Assess the utilities. Ensure the building has additional fuel for portable generators on hand.
- Protect the equipment and facilities located in underground levels.

Additional lessons learned from Hurricane Sandy include:

- **Protect elevator service.** Loss of elevator service in high-rise buildings hinders vertical building access and significantly affects building service and operations. Elevator and conveyance system components should be protected appropriately to enable restoration of elevator service to the building as quickly as possible.
- **Steam and gas heating systems are less prone to prolonged disruption than oil furnaces.** Most of the buildings heated by steam and gas were online within a week or two after Hurricane Sandy, while those with oil furnaces were reliant on an emergency heat source 2 months following Hurricane Sandy. In addition, damaged oil tanks contaminated buildings, which complicated restoration and repairs.
- **Protect the emergency power system**. The emergency power equipment and controls must be protected to ensure they will be available when needed.
- **Use flood damage-resistant material.** Use of flood damage-resistant materials in lower floors reduced repairs in many of the buildings that were flooded during Hurricane Sandy. Repairing flooded buildings offers an opportunity to improve building construction and make them more flood-damage resistance.
- **Limit the use of lower floors.** Buildings where lower levels were limited to parking, building access, and storage areas (e.g., fuel vaults) experienced less flood damage than those with multi-use lower levels.
- **Elevate temporary equipment.** Placing temporary equipment on scaffolding or platforms adjacent to facilities reduced the number of times temporary utility equipment had to be shut down and relocated.

If the building occupants are not evacuated before a hurricane, they should stay indoors during the hurricane and away from windows and glass doors.

16.3.2 Floods

(This section is cited from the following resource: Be Ready-Plan for Hazards: Flooding, New York City Emergency Management. https://www1.nyc.gov/site/em/ready/flooding.page)

Floods are one of the most common hazards in the United States. Flood effects can be local, impacting a neighborhood or community, or very large, affecting entire river basins and multiple states. However, all floods are not alike: Some floods develop slowly, sometimes over a period of days, as opposed to flash floods, which develop quickly, sometimes in just a few minutes and without any visible signs of rain. Flash floods often have a dangerous wall of roaring water that carries rocks, mud, and other debris and can sweep away most things in its path. Overland flooding occurs outside a defined river or stream, such as when a levee/embankment is breached, but still can be destructive. Flooding can also occur when a dam breaks, producing effects similar to flash floods. Be aware of flood hazards no matter where the premises is, but especially if the premises is in a low-lying area, near water or downstream from a dam. Even very small streams, gullies, creeks, culverts, dry streambeds, or low-lying ground that appear harmless in dry weather can flood. Every state is at risk from this hazard.

If a flood is likely in area, FLS Director should:

- Stay tuned to the latest updates via the radio, TV, or internet.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, instruct occupants to move immediately to a higher ground.

- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without typical warning signs such as rain clouds or heavy rain.

16.3.3 Tornadoes

(This section is cited from the following resources:

1. Plan Ahead for Disasters: Tornadoes. Ready.gov. https://www.ready.gov/tornadoes
2. Tornado Safety at Home, Work or at Play. Ready Wisconsin. http://readywisconsin.wi.gov/tornado/home_work_safety.asp)

Windows and outer walls of the Bank One Building in downtown Fort Worth, Texas were damaged by the 2000 Fort Worth tornado.

A tornado is a violently rotating column of air that extends from a thunderstorm to the ground and is often—although not always—visible as a funnel cloud. Lightening and hail are common in thunderstorms that produce tornadoes. Tornadoes cause extensive damage to structures and disrupt transportation, power, water, gas, communications, and other services in the direct path and in neighboring areas. Related thunderstorms can cause heavy rains, flash flooding, and hail. Damage paths can be in excess of one mile wide and 50 miles long. Every state is at some risk from this hazard. Tornadoes can strike in any season, but occur most often in the spring and summer months. They can occur at all hours of the day and night, but are most likely to occur between 3 p.m. and 9 p.m.

Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible.

2007 Brooklyn/Queens tornado was the strongest tornado on record to strike in New York City. It was formed in the early morning hours of August 8, 2007, skipping along an approximately 9 miles long path, from Staten Island to Brooklyn. Several people were treated at area hospitals for flying glass injuries. At least 40 buildings and 100 cars were damaged.

If a premises is under a tornado WARNING, the FLS Director should advise the occupants to stay away from corners, windows, doors, and outside walls. DO NOT OPEN WINDOWS. Occupants may need to move to a pre-designated shelter, such as a basement, and get under a sturdy table or the stairs. A specially-constructed "safe room" within a building offers the best protection. If a basement is not available, move to a small interior room or hallway on the lowest floor and cover yourself with anything close at hand: towels, blankets, pillows. If possible, get under a sturdy table, desk or counter.

16.3.4 Earthquakes

(This section is cited from the following resource: Be Ready-Plan for Hazards: Earthquakes, New York City Emergency Management. **https://www1.nyc.gov/site/em/ready/earthquakes.page)**

One of the most frightening and destructive phenomena of nature is a severe earthquake and its terrible aftereffects. An earthquake is a sudden movement of the earth, caused by the abrupt release of strain that has accumulated over a long time.

If the earthquake occurs in a populated area, it may cause many deaths and injuries and extensive property damage.

During an earthquake, the FLS Director should suggest the building occupants to:

- minimize the movements during an earthquake to a few steps to a nearby safe place.
- stay indoors until the shaking has stopped. Most injuries during earthquakes occur when the occupants are hit by falling objects when entering into or exiting from buildings.
- stay away from glass, windows, outside doors or anything that could fall, such as lighting fixtures or furniture.
- be aware that the electricity may go out or the sprinkler systems or fire alarm may activate.
- avoid using the elevators.
- be prepared for aftershocks. These secondary shockwaves are usually less violent than the main quake but can be strong enough to do additional damage to weakened structures.
- be aware of possible tsunamis if the premises is in coastal area. These are also known as seismic sea waves (mistakenly called "tidal waves"). When local authorities issue a tsunami warning, assume that a series of dangerous waves is on its way.

16.4 Failure of building utilities or systems

16.4.1 Electric power failure

(This section is cited from the following resource: Be Ready-Plan for Hazards: Utility Disruptions, New York City Emergency Management. https://www1.nyc.gov/site/em/ready/utility-disruptions.page)

Utility failures or incidents are common occurrences and may happen at any time. Preplanning for utility failures is necessary to protect building occupants as well as building properties. The FLS Director should know the locations of all utility power sources.

Major power outage events in NYC:

- The Northeast blackout of 2003: A widespread power outage that occurred throughout parts of the Northeastern and Midwestern United States on 08/14/2003, affected over 55 million people. Few households and businesses were restored by the end of day. However, many others did not get their power back until two days later. Some areas lost water pressure because pumps lacked power. Transportation systems were shut down. Many gas stations were unable to pump fuel due to lack of electricity. Cellular communication devices were disrupted. Large numbers of business operations were closed in the affected area.
- Hurricane Sandy Power Outage in 2012: Close to 2 million people lost power at some point during the storm, with almost a third being in Manhattan. Parts of Lower Manhattan and Brooklyn even lost power prior to Sandy, when Con Edison preemptively disconnected them from the city's grid to protect equipment and reduce potential downtime. It took four to five days to restore power to most people in Manhattan. Damage to electrical equipment within buildings took considerably longer in

many cases. Other utility systems experienced varying degrees of disruption. Con Edison's steam system, which services 1,700 large buildings in Manhattan, including major hospitals, was unable to supply steam to one-third of its customers when the storm inundated four of the system's six plants and flooded utility tunnels. It took nearly two weeks to restore service to these customers.

Prolonged power outages are not only a nuisance — they are also potentially life-threatening and can cause major economic loss. Power outages occur most often during the summer months, when residents run air conditioners and power usage is at its peak.

Most buildings with emergency power use either battery-powered systems for emergency power and/or generators for longer duration outages. Battery-powered systems are typically used for emergency egress lighting, data servers, alarm systems, and other small equipment. Generators, on the other hand, typically service a number of systems, including heating, ventilation equipment, fire pumps, elevators, and domestic water booster pumps.

To protect emergency power systems, facility managers should first identify the emergency power

needs and then decide how to best to prevent the emergency power from failing.

It is important to consider the entire emergency power supply system as a whole or it may not function during an emergency. An effective plan should identify:

- Which building systems require emergency power;
- What emergency power capacity is needed, how quickly it must be activated, and for how long;
- Effective protection for the generator, such as locating it in an elevated and hardened position;
- How distribution equipment, transfer switches, fuel pumps, and critical equipment supplied by the emergency power system will be protected ;
- A reliable and consistent fuel source for the generator (source should also be protected from flooding by being properly anchored, submersible, or elevated).

16.4.2 Natural gas supply disruptions or natural gas leak

(This section is cited from the following resources:

1. Be Ready-Plan for Hazards: Gas Supply Disruptions, New York City Emergency Management. https://www1.nyc.gov/site/em/ready/gas-disruptions.page)
2. Gas Safety. Con Edison. https://www.coned.com/en/safety/safety/gas-safety?utm_source=SmellGasActFAst&utm_medium=Slider&utm_campaign=Homepage
3. Gas Emergencies. National Grid. https://www.nationalgridus.com/NY-Home/Safety/Report-a-Gas-Emergency)

Since natural gas is odorless, a harmless chemical odor is added so leaks will be detectable. The chemical has a very distinct and unpleasant odor that many people compare to the smell of rotten eggs. Natural gas is lighter than air and tends to rise, while most other flammable gases have higher vapor densities and tend to move downward. There are hazards inherent to natural gas if the levels are high enough. For example, inhaling a high concentration of natural gas can lead to asphyxia or a natural gas leak can very easily turn into a fire or an explosion.

What to do if you smell gas:

- Call 911 to report the smell of gas and notify the utility company.
- If the odor is faint, open windows to air out the area before leaving.
- If the odor is strong, leave the premises IMMEDIATELY.

- Isolate and eliminate potential ignition sources. Do not smoke or light lighters/matches. Do not use your telephone, switch on electrical appliances, lights, or even turn on a flashlight in the area where you smell gas — any spark could cause a fire.

Natural gas explosion incidents:

2014 East Harlem gas explosion: On 3/12/2014, Con Edison received a call from a resident at a building in NYC East Harlem reporting a (natural) gas leak around 9:13 a.m. Seventeen minutes later, the gas leak led to an explosion and knocked down two 5-story buildings. The accident killed at least eight people and injured at least 70 others.

2015 East Village gas explosion: A gas explosion occurred in the afternoon of March 26, 2015 in a building located in the NYC East Village. The explosion was caused by an illegal tap into a gas main. The explosion caused two deaths and, injured at least nineteen people. It also resulted in fire that completely destroyed three adjacent buildings.

2016 Bronx gas explosion: The explosion occurred after firefighters responded to reports of a strong gas smell coming from a two-story house in Bronx, NYC. The explosion was caused by an illegal natural gas hookup that leaked and then sparked. The explosion destroyed the two-story home. 20 people were injured and an FDNY battalion chief was killed.

16.4.3 Carbon monoxide leak

(This section is cited from the following resources:

1. Be Ready-Plan for Hazards: Gas Supply Disruptions, New York City Emergency Management. https://www1.nyc.gov/site/em/ready/gas-disruptions.page
2. Be Ready-Plan for Hazards: Carbon Monoxide, New York City Emergency Management. https://www1.nyc.gov/site/em/ready/carbon-monoxide.page
3. NYC EMERGENCY MANAGEMENT URGES NEW YORKERS TO PREPARE FOR EXTREME COLD , New York City Emergency Management, 2016. http://www1.nyc.gov/site/em/about/press-releases/20161214_pr_nycem_URGES-NEW-YORKERS-TO-PREPARE-FOR-EXTREME-COLD.page**)**

Carbon monoxide is a colorless, tasteless and odorless gas. It is a by-product of fuel combustion that can be created by typical heating fuels. High levels of carbon monoxide indoors can be dangerous to your health, and can cause serious illness or death if inhaled in large concentrations.

Everyone is at risk to being exposed to carbon monoxide; however, people with health problems, seniors, pregnant women, and infants are at a higher risk.

Causes of Carbon Monoxide Poisoning

Carbon monoxide can build up to a dangerous level if a fuel-burning appliance isn't operating properly, or is not safely venting out fuel combustion by-products. For instance, dangerous levels of carbon monoxide can be produced from improperly vented furnaces, plugged or cracked chimneys, water heaters, space heaters, fireplaces, stoves, and tail pipes. Running a vehicle inside a garage is the most common carbon monoxide danger. During the heating season, when fresh air circulation is reduced, it's especially important to prevent indoor carbon monoxide buildup.

Carbon monoxide leaking events

Carbon monoxide poisoning in NYC TriBeCa high-rise building, 2017: People started feeling faint around 8:30 a.m. in a 12-floor building just as a worker opened a package in the basement, stirring worries that the parcel might have been poisonous. However, the NYPD determined that it was not hazardous. The problem ultimately was traced to a broken boiler pipe in a grocery store that was located in the basement.

Thirty-two people, mostly in the basement and first floor, were sickened. The shop and the apartments above were evacuated as firefighters saw carbon monoxide levels maxed out on their meters in several areas. These meters measure up to 1,000 parts per million, enough to render people unconscious instantly.

Carbon monoxide poisoning around an indoor pool in a Michigan hotel, 2017: Staff at the Michigan hotel found several children laying on the indoor pool deck unresponsive and unconscious. The staff members immediately opened the doors to the indoor-pool area and called 911. First responders then went through each floor of the hotel to evacuate any remaining visitors and staff. One child was found dead and six other children were hospitalized for apparent carbon-monoxide poisoning. The carbon-monoxide leak was caused by a broken pool heater. The fire captain said the highest carbon monoxide reading in the pool area was 800 parts per million, far above the 50 ppm maximum that the U.S. OSHA recommends for workplace exposure for a normal healthy adult.

Tips for Preventing Carbon Monoxide Poisoning

- **Install carbon monoxide detectors** and check them regularly to make sure the batteries are working. NYC law requires owners to provide and install at least one approved carbon monoxide alarm within 15 feet of the primary entrance to each sleeping room. Test these alarms on a regular basis.
- Carbon monoxide comes from the burning of fuel. Have the heating systems, fuel-burning appliances, flues, and chimneys inspected, cleaned and tuned up annually by a qualified technician.
- Never heat your premises with a gas stove or oven.
- Kerosene heaters and propane space heaters are dangerous and illegal in New York City.
- Never use any gas-powered appliance, such as a generator, indoors.
- Never use a charcoal grill or a hibachi indoors.
- Never run a car or truck in a garage or enclosed area. Clear exhaust pipes before starting a car or truck after it snows.

Signs of carbon monoxide poisoning include:

- Headache;
- Flu-like symptoms, such as dizziness, chest pain, nausea, and vomiting;
- Breathing difficulties;
- Confusion and loss of consciousness;
- Cardiac problems.

If you suspect carbon monoxide poisoning:

- Open windows;
- Leave the premises and get to fresh air immediately;
- Call 911;
- Call the New York City Poison Control Center: 212-POISONS (212-764-7667).

16.4.4 Water supply disruption

(This section is cited from the following resources:

1. Be Ready-Plan for Hazards: Water Supply Disruptions, New York City Emergency Management. **https://www1.nyc.gov/site/em/ready/water-supply-disruptions.page)**

Since water is essential for survival, it's important to know what to do in the event of a water supply emergency. Water main breaks, drought, and water contamination can affect both water quality and use in New York City.

Water Main Breaks

Water main breaks may temporarily halt water supply to households and businesses in the surrounding areas. Breaks can also result in property damage, street and sidewalk closures, and traffic and business disruptions. Temperature change causes most water main breaks. A 10-degree change in air or water temperature can cause pipes to contract or expand, making them fragile. When water or ground temperatures dip near the freezing point, it creates tremendous stress inside and outside the pipe. Additionally, some water pipes installed before World War II are made of cast iron — a brittle material susceptible to breakage.

If you see water coming up from the ground or roadway, or suspect a water main break, call 311 or contact 311 online.

Be prepared to provide:

- A description of the condition;
- What is being affected (street, cellar, basement, subways, etc.);
- The exact location of the problem;
- Your name, address and telephone number.

You may also contact DEP via 311 if you lose water service, experience low water pressure or the premises is flooded due to a water main break.

If water is causing a dangerous condition, such as street or sidewalk collapse or severe indoor or outdoor flooding, you must call 911.

Water Contamination

Water supply contamination has not been a significant hazard in New York City in the last century, but it's important to know what to do in the event the City's water supply becomes contaminated.

If authorities determine that there is a concern about drinking water quality, you will be advised of what actions to take. In some cases, the occupants may be told not to use water for cooking or for drinking purposes unless it is boiled, treated with bleach or disinfected by other means. In an extreme case, the occupants may be told not to use the water for hand-washing or even bathing purposes.

16.5 Civil unrest and disturbances

(This section is cited from the following resources:

1. State of New Jersey 2014 Hazard Mitigation Plan, Section 5. Risk Assessment: Civil Unrest. State of New Jersey, Office of Emergency Management. http://ready.nj.gov/programs/pdf/mitigation2014b/mit2014_section5-14.pdf
2. Emergency Response Guide, State of Colorado, 2014. http://www.colorado.gov/docs/pdf/EmergencyResponseGuideFinal.pdf)

A civil unrest and disturbance is a public demonstration or gathering that results in a disruption of essential functions, rioting, looting, arson or other unlawful behavior. Civil disturbances can take the form of small gatherings or large groups blocking or impeding access to a building, or disrupting normal activities by generating noise and intimidating people. Civil unrest and disturbance can quickly overwhelm local public safety resources and can result in millions of dollars of damage.

The worst riot to occur in the United States took place in Los Angeles in 1992. The riot was first started in South Los Angeles and then eventually spread out into other areas over a 6-day period within the Los Angeles metropolitan area. The riots started on April 29 after a trial jury acquitted four Los Angeles Police Department officers of assault and use of excessive force. The mostly white officers were videotaped beating an African-American following a high-speed police pursuit. Thousands of people throughout the metropolitan area in Los Angeles rioted over 6 days following the announcement of the verdict. In total, 53

people were killed during the riots, over 2,000 people were injured and estimates of property damage topped $1 billion.

Other recent civil unrest and disturbances:

Protests of election results, 2016: Nov. 9-27. As a result of the 45th president being elected, thousands protested across twenty five American cities and unrest broke out in Downtown Oakland, California and Portland, Oregon. In Downtown Oakland over 40 fires started and police officers were injured.

May Day protests, 2017: These protests were a series of protests that took place on 05/01/2017 throughout the United States. Protests became violent in Olympia, WA and Portland, OR. In Portland, protesters allegedly threw lead balls, smoke bombs, paint, glass bottles, and cans of Pepsi at police officers. There were multiple cases of property damage and arson. In Olympia, black-clad protesters shattered windows, and threw smoke-issuing devices and rocks at police.

Preparations and responses for civil unrest and disturbance

During demonstrations and other large gatherings, inform the building occupants not to provoke or obstruct demonstrators. Secure the premises area (doors, safes, files, vital records, expensive equipment).

If a civil disturbance or civil unrest occurs outside of your premises:

- Ensure that all staff/visitors are aware of the civil unrest situation;
- Maintain situational awareness of the evolving situation and communicate changes to staff/visitors;
- Maintain a calming influence over your group. Reassure staff and visitors that everything possible is being done to return the situation to normal;
- Suggest all building occupants:
  - Remain in the building;
  - Stay away from doors and windows;
  - Identify one point person to establish communications with and then call 9-1-1;
  - Keep phone free as much as possible for incoming messages;
  - Wait for the "all-clear" from supervisors;
- Provide the "all-clear" when the situation has resolved;
- Suggest the building occupants to walk in groups to parking facilities (after the "all-clear" is given);

16.6 Interaction with first responders

16.6.1 Citywide Incident Management System (CIMS)

(This section is cited from the following resource:

Citywide Incident Management System Charts, New York City Office of Emergency Management. http://www.nyc.gov/html/oem/downloads/pdf/cims_charts.pdf)

On May 14, 2004, the Citywide Incident Management System (CIMS) was adopted as the City's program for responding to and recovering from emergencies, and for managing planned events.

CIMS establishes roles and responsibilities and designates authority for city, state, and other government entities, and non-profit and private sector organizations performing and supporting emergency response.

The CIMS Protocol is New York City's implementation of the National Incident Management System (NIMS). NIMS compliance is a requirement for federal domestic preparedness funding for local governments. While CIMS has been developed to address New York City's unique incident management requirements, its full compliance with NIMS ensures compatibility with incident command systems in use in other states and federal agencies. CIMS is also designed to be scalable, facilitating the integration of additional organizations, such as private sector and non-profit entities. CIMS defines how citywide emergencies or multiple large-scale incidents will be managed. It also defines agency roles and responsibilities at emergency incidents.

The owner, FLS Director and all other FLS staff and building occupants shall comply with the orders of the Fire Department or other incident commander or emergency response personnel should such incident commander or emergency response personnel be present at the building. As an FLS Director, you should be familiar with different primary agencies during different incidents. Primary agencies are designated in CIMS to have overall responsibility for an incident, including overall management of strategic and tactical operations. Primary agencies will cooperate with supporting agencies to successfully achieve incident objectives. Incidents managed by a unified command will have more than one primary agency.

In a single command response, the incident commander will be the designated member of the primary agency who is responsible for overseeing that agency’s operations for the incident. The incident commander will designate the operations section chief.

The following table list the core competencies of different agencies. Core Competencies are functional areas of expertise that relate specifically to tactical operations managed by the Operations Section. Agencies have the authority to direct operations related to their Core Competencies at incidents. If more than one agency is capable of performing the same tactical operations, the agency with the Core Competency will give tactical direction, by the ranking officer, to other agencies performing operations within that competency**.**

Table: Local agencies' core competencies

AGENCY	CORE COMPETENCIES		AGENCY	CORE COMPETENCIES
FDNY	• Fire Suppression • Pre-hospital Emergency Medical Care • Search and Rescue • Structural Evacuation, Structure Collapse • Haz-Mat Life Safety and Mass • Decontamination • Arson Investigation (Cause &Origin) • Elevator Incident or Emergency • Combined Space Rescue		DOT	• Bridges and Roadways: Infrastructure • Assessment, Repair and Reconstruction • Transportation Systems Management • Staten Island Ferry Operations
NYPD	• Law Enforcement and Investigation • Intelligence Collection and Analysis • Crime Scene Processing / Evidence • Civil Disturbance • Suspicious Package • Explosive Device, Bomb Threat • Preservation • Site Management • Perimeter Control • Traffic Control • Crowd Control • Site Security and Force Protection • Evacuation (Area and / or Law Enforcement • related) • Water Search and Rescue • Haz-Mat Assessment and • Investigation (Crime Scene / Terrorism) • Accident Investigation • VIP Protection • Arson Investigation (Major Case)		DOHMH*	• Disease Surveillance and Epidemiology • Public Health Orders, Clinical Guidance • and Risk Communication • Mass Prophylaxis / Vaccination • Laboratory Testing (Biological and • Radiological) • Public Health Assessment • Environmental Mitigation (Radiological and Biological) • Animal-Related Surveillance and Vector • Control • Mental Health Needs Assessment and Service Coordination
			ConEd	• Electric, Gas and Steam: Infrastructure • Assessment, Repair and Reconstruction
DDC*	• Technical Debris Management Operations • Technical Stabilization, Remediation and • Demolition • Public Buildings, Roadways, Water and • Wastewater: Infrastructure • Assessment, Repair and • Reconstruction		DEP	• Environmental Monitoring, Sampling, • Evaluation and Analysis • Environmental Mitigation (Chemical) • Environmental Law Enforcement • Water and Wastewater: Infrastructure • Assessment, Repair and • Reconstruction
DOB	• Damage Assessment (Structural) • Building Re-occupancy (Structural)		OEM*	• Interagency Coordination and Support

*****DDC**:** Department of Design and Construction
DOHMH:Department of Health and Mental Hygiene
OEM: Office of Emergency Management

In a unified command response with multiple incident commanders, the primary agencies will co-locate at a single incident command post and jointly set incident objectives (The following table list some examples for unified command incidents). The unified command may designate a single operations section chief by mutual agreement, or he/she may be designated from each primary agency with a relevant core competency.

Depending on the location and/or type of an incident, additional agencies may have jurisdictional responsibilities for managing the incident (e.g. incidents occurring on state or federal property within NYC). The primary agency matrix tries to anticipate these scenarios and identifies these agencies as potential primary agencies that will participate in a unified command, as appropriate.

Table: Unified Command Incidents

INCIDENT TYPE	PRIMARY AGENCIES
Chemical, Biological, Radiological or Nuclear (CBRN) / Haz-Mat Incident *	NYPD, FDNY
Citywide Public Health Emergency	DOHMH, NYPD, FDNY
Explosion	FDNY, NYPD
Natural Disaster / Weather Emergency	OEM, NYPD, FDNY, DOT, DSNY
Utility Incident: Electric, Gas, Steam	NYPD, FDNY
Utility Incident: Water / Wastewater	DEP, FDNY, NYPD
Utility Incident: Telecommunications	DOITT, NYPD, FDNY

16.6.2 Interaction with first responders

The FLS Director, all other FLS staff and building occupants must comply with the orders of FDNY firefighting personnel. The lobby and the building entrance must be kept clear for the FDNY or other first responders access. When the first responders arrive, the FLS Director must remain on the Fire Command Center to greet the first responders and the Building Engineer should be available and prepared to follow the first responders' instructions.

You should silence the alarm system when authorized by the first responders. Audible silence allows for easier communication for the first responders while responding to an alarm.

As an FLS Director, you are required to notify arriving first responders of the nature of the emergency and the actions already taken. You should also provide the following materials to the first responders:

- Floor plans
- Building Information Card (BIC)
- FDNY Plan
- Elevator and stair diagrams
- Elevator keys
- Any other master keys/access cards that may be required
- Premises security radios/walkie-talkies

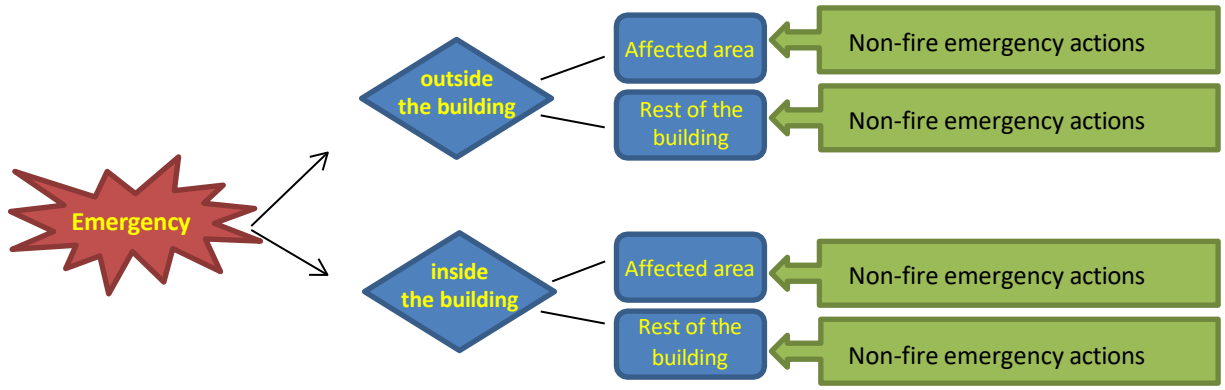
As an FLS Director, you may need to quickly provide the first responders and the incident commander with the following information, if known:

- Location of the incidents
- The nature of the incidents (what caused the incident)
- The conditions in the affected area
- The status of the stairways (stairway being used by occupants and stairway suggested to be used for FDNY firefighting personnel)
- The implementation of the non-fire emergency actions (shelter in place, in-building relocation, partial evacuation or full evacuation)
- Status of elevators and HVAC system
- The location of the evacuated people
- Any problems with the implementation of the non-fire emergency actions
- Number of potential victims at the location
- Any people unaccounted for
- Any problems reported to you
- Any impairment of the fire protection or major building systems

It is critical for the FLS staff to follow orders of the first responders or incident commander. The first responders may request assistance of the FLS Director and other FLS staff to operate and control the building systems.

13. 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 17-A1, 17-A2, 17-B1, 17-B2, 17-C1 and 17-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 FDNY has created three categories of response actions: they are "**RECOMMENDED**" (refer to table 17-A1 & table 17-A2), "**ACCEPTABLE**" (refer to table 17-B1 & table 17-B2) and "**UNACCEPTABLE**" (table 17-C1 & 17-C2).

The following content is arranged as follows:

- The type of the emergency
  - **Outside** – Action to be taken for:
    - Affected Area -Recommended → Acceptable → Unacceptable
    - Rest of the Building -Recommended → Acceptable → Unacceptable
  - **Inside – Action to be taken for:**
    - Affected Area -Recommended → Acceptable → Unacceptable
    - Rest of the Building -Recommended → Acceptable → Unacceptable

This section offers, as a general guide, the following non-fire emergency (EAP) actions steps, as used in table 17-A1, 17-A2, 17-B1, 17-B2, 17-C1 and 17-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 17-A1 & table 17-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 17-B1 & table 17-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 17-C1 & table 17-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.**

17.1 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.

17.1.1 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 17-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 17-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 17-C1)

(1) Unacceptable actions for the affected area: 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.

17.1.2 <u>Biological agent released inside the building (in a confined area only)</u>

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

a. Recommended actions (refer to table 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: 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 17-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.

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

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

a. Recommended actions (refer to table 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: 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 17-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.

17.2 Emergency actions for chemical incident or release

17.2.1 <u>Chemical agent released outside the building impacting the immediate area</u>

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

a. Recommended actions (refer to table 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: NA.

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

Unacceptable actions: (refer to table 17-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.

17.2.2 <u>Chemical agent released inside the building</u>

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

a. Recommended actions (refer to table 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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 in-building relocate the occupants.

(2) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: 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.

Unacceptable actions: (refer to table 17-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.

17.3 Emergency actions for carbon monoxide/natural gas leak

17.3.1 <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 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: 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 17-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.

17.3.2 Carbon Monoxide/Natural Gas Leak found inside the building (in a specific floor/area only)

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 17.3.3 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 17-A1)

(1) Recommended actions for the affected area: 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 **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 17-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 17-C1)

(1) Unacceptable actions for the affected area: 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) <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.

17.3.3 <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 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: NA.

c. Unacceptable actions: (refer to table 17-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.

17.4 Emergency actions for explosion

17.4.1 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 17-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 in-building relocation areas.

If the outdoor explosion has severely damaged the building structure, refer to Section 17.4.2 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 in-building relocation areas.

If the outdoor explosion has severely damaged the building structure, refer to Section 17.4.2 of this booklet: "An explosion happened inside the building".

b. Acceptable actions: (refer to table 17-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 17-C1)

(1) Unacceptable actions for the affected area: 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) Unacceptable actions for the rest of the building: 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.

17.4.2 <u>An explosion happened inside the building</u>

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

a. Recommended actions (refer to table 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: NA.

c. Unacceptable actions: (refer to table 17-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.

17.5 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 17.4 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:

17.5.1 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 17-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 17-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 17-C1)

(1) Unacceptable actions for the affected area: 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.

17.5.2 <u>A suspicious package is reported inside the building</u>

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

a. Recommended actions (refer to table 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: 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 17-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.

17.6 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 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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 in-building relocation area.

(2) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: 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 17-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.

17.7 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.**

17.8 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.

17.8.1 <u>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.</u>

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

a. Recommended actions (refer to table 17-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 in-building 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) <u>Recommended actions for the rest of the building</u>: 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 17-B1)

(1) <u>Acceptable actions for the affected area</u>: 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 17-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.

17.8.2 <u>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</u>

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

a. Recommended actions (refer to table 17-A1)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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) <u>Acceptable actions for the affected area</u>: NA.
(2) <u>Acceptable actions for the rest of building</u>: NA.

c. Unacceptable actions: (refer to table 17-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 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 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 in-building relocation areas for the occupants.

II. Other special notes:
All building entrances should be closed.

17.9 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.

17.9.1 <u>Natural disaster and the building structure is not compromised</u>

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

a. Recommended actions (refer to table 17-A2)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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 17-B2)

(1) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: 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 17-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.

17.9.2 <u>Natural disaster causing minor building physical damage (such as broken windows), which will NOT cause the building to collapse</u>

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 17-A2)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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 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) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: NA.

c. Unacceptable actions: (refer to table 17-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.

17.9.3 <u>A natural disaster which caused major building structural failure that may cause building collapse</u>

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

a. Recommended actions (refer to table 17-A2)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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) <u>Acceptable actions for the affected area</u>: NA.

(2) **<u>Acceptable actions for the rest of building</u>: NA**.

c. Unacceptable actions: (refer to table 17-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 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 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 in-building relocation areas for the occupants.

II. Other special notes:

All building entrances should be closed.

17.9.4 <u>Building power failure which is caused by a natural disaster</u>

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

a. Recommended actions (refer to table 17-A2)

(1) <u>Recommended actions for the affected area</u>: 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) <u>Recommended actions for the rest of the building</u>: 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) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: NA.

c. Unacceptable actions: (refer to table 17-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.

17.9.5 <u>The building affected by flooding caused by a natural disaster</u>

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

a. Recommended actions (refer to table 17-A2)

(1) <u>Recommended actions for the affected area</u>: in-building relocation.

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

(2) <u>Recommended actions for the rest of the building</u>: 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) <u>Acceptable actions for the affected area</u>: NA.

(2) <u>Acceptable actions for the rest of the building</u>: NA.

c. Unacceptable actions: (refer to table 17-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 17-A1. RECOMMENDED non-fire emergency actions for different scenarios

This table is only a reference guide. IT CANNOT BE USED ALONE. The details are provided between Section 17.1 to Section 17.9

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

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

Table 17-A2. RECOMMENDED non-fire emergency actions for natural disasters

This table is only a reference guide. IT CANNOT BE USED ALONE. The details are provided between Section 17.1 to Section 17.9

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

Table 17-B1. ACCEPTABLE non-fire emergency actions for different scenarios

This table is only a reference guide. IT CANNOT BE USED ALONE. The details are provided between Section 17.1 to Section 17.9

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

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

Table 17-B2. ACCEPTABLE non-fire emergency actions for natural disasters

This table is only a reference guide. IT CANNOT BE USED ALONE. The details are provided between Section 17.1 to Section 17.9

Scenario	Affected Area	The rest of the building
Natural disaster and the building structure is not compromised		▮ *In-building relocation*
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 17-C1. UNACCEPTABLE non-fire emergency actions for different scenarios

This table is only a reference guide. IT CANNOT BE USED ALONE. The details are provided between Section 17.1 to Section 17.9

Scenario	The location where the scenario occurs					
	Outside the building		**Inside the building (in a specific area only)**		**inside the building (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	x Shelter in place x Evacuation (P/F)*	x Evacuation (P/F)*	x Not isolate the individuals who were directly exposed to the agent		x Not isolate the individuals who were directly exposed to the agent	
Chemical Agent Release	x Shelter in place x Evacuation (P/F)*	x Evacuation (P/F)*	x Shelter in place		x Shelter in place	
CO/Natural Gas release	x Shelter in place x Evacuation (P/F)*	x Evacuation (P/F)*	x Shelter in place		x Shelter in place x In-building relocation x Partial evacuation	x Shelter in place x In-building relocation x Partial evacuation
Explosion	x Shelter in place x Evacuation (P/F)*	x Evacuation (P/F)*	x Shelter-in-place x In-building relocation x Partial evacuation	x Shelter-in-place x In-building relocation x Partial evacuation	x Shelter in place x In-building relocation x Partial evacuation	x Shelter in place x In-building relocation x Partial evacuation
Suspicious package	x Shelter in place x Evacuation (P/F)*	x Evacuation (P/F)*	x Shelter-in-place		x Shelter in place	
Civil disturbances	x Shelter in place x Evacuation (P/F)*	x Evacuation (P/F)*				
Building utilities failure	NA					
Building damage	NA		**Building has minor physical damages**		**Building suffers major structural failure**	
			Affected area	**The rest of the building**	**Affected area**	**The rest of the building**
			x Shelter in place		x Shelter in place x In-building relocation x Partial evacuation	x Shelter in place x In-building relocation x Partial evacuation
Active shooter	x Shelter in place x Evacuation (P/F)*	x Evacuation (P/F)*				

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

Table 17-C2. UNACCEPTABLE non-fire emergency actions for natural disasters

This table is only a reference guide. IT CANNOT BE USED ALONE. The details are provided between Section 17.1 to Section 17.9

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

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

PART IV. ACTIVE SHOOTER AND MEDICAL EMERGENCY PREPAREDNESS

Chapter 18. ACTIVE SHOOTER EMERGENCY

18.1 Introduction

The definition of an active shooter is: An individual actively engaged in killing or attempting to kill people in a confined and populated area; 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 law enforcement 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.

18.2 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:

18.2.1 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.

18.2.2 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 activated. 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, security, 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:

        - Have an escape plan and route in mind.
        - Visualize the entire escape route before beginning to move, and avoid using elevators or escalators.
        - 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.**

- 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).
- Follow the orders of police and other first responders.

2. Barricade (hide)

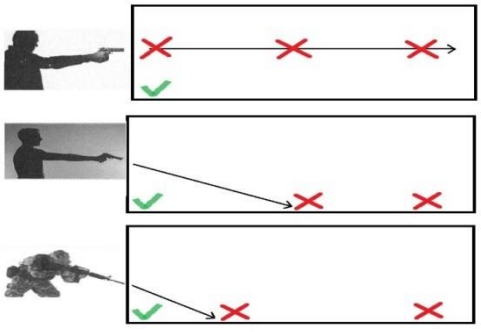
If it is not possible to evacuate, find a place to barricade yourself where the active shooter is least likely to find you.

(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 or slow a bullet. Office furniture and equipment such as vending machines, copy machines, and file cabinets can stop or slow many types of bullets.
- The ideal place in which to barricade yourself should not trap or restrict your options for movement.

(2)What to do when barricading:

- Turn off the lights unless doing so will disclose your location
- Lock the door, if applicable.
- Blockade the entrance with heavy furniture, if available. DO NOT use your body to barricade.
- Silence, your cell phone, pager and/or any other electronic devices. Do not use the "vibrate" which can be heard in a quiet room.
- Turn off any source of noise (i.e., two way radios, televisions).
- Hide behind large items (i.e., file cabinets, copy machines, vending machines).
- If more than person, find separate hiding places, if possible.
- Remain still and quiet.
- Stay low (see the example to right).
- Be aware that, depending on the situation, it may take some time for law enforcement personnel to secure the area and reach your location. Until contact is made, remain calm, quiet, and alert



Where is the safest place in the room if rounds are fired through the door or wall?

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: by following the flowing actions:

- Collaborate and act as a group, if possible.
- Act aggressively.
- Throw items and improvise weapons.
- Yell.
- 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).
  - 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.
  - 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 or security 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:
  The Fire Department recommends training building occupants in the following protocol for interacting with law enforcement personnel during an active shooter incident. Law enforcement personnel responding to an active shooter incident are focused on identifying and neutralizing the shooter(s). A building occupant should not act in a manner that may cause a law enforcement officer to view him or her as a threat.
  - Follow all official instructions.
  - Do not attempt to run towards or grab onto police officers.
  - Resist the urge to turn quickly or make any sudden movements.
  - Keep your distance. Do not run towards or grab officers. Do not 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 hands visible and EMPTY. Law enforcement officers will be looking at the hands of all persons they encounter, both to identify the shooter and for their own safety. Keep your hands open, above your head and empty. Do not carry any items that could be confused with a weapon or a dangerous device.
  - 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. If possible, proceed to a more secure area before requesting assistance.
  - Remain calm.
  - 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. **Information for 911 operators**
   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.

18.2.3 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 (refer to the reference material section of this booklet).

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 Security Directors of buildings or FLS Director 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.

18.2.4 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.

18.3 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 **recommended actions** - the actions that the FDNY strongly recommends the applicants should apply for the specific scenarios.
- The **acceptable actions** - the actions that the FDNY accepts but not recommends.
- The **unacceptable actions** - 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.

18.3.1 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.

II. **Other special notes**:

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

18.3.2 <u>If an active shooter is inside the building</u>

a. Recommended actions

(1) <u>Recommended actions for the WHOLE building:</u>

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 this 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."*

The NYPD and 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.

  ► **Elevator operation**

  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.

18.3.3 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.

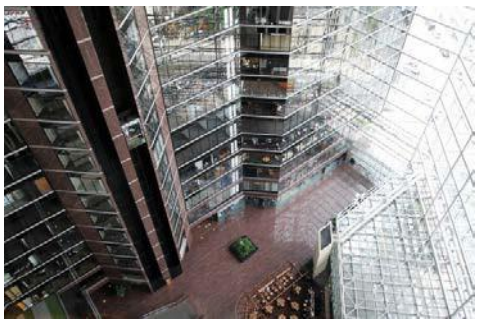
Remember that the first police officers to arrive on the scene may not stop to help injured persons. Expect teams comprised of additional officers and emergency medical personnel to follow the initial responding officers. These teams will treat and remove any injured persons from the areas that have 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.

18.4 Real case discussion

This booklet provides real active shooter cases that occurred in different occupancies. The instructor **must select at least one case from each category** (hotel, public assembly, school, and office) to have an open discussion and classroom exercise with the students. The FDNY recommends that candidates should also study the other cases in this booklet that the instructor did not discuss. **The FDNY provides schools the recommended answers for all discuss questions. Every school should provide these answers to the students after the real case discussion session**.

18.4.1 Hotel cases

(1) Hotel case 1: 2015 Austin Omni hotel shooting



Case summary: A shooter opened fire in the lobby of the Omni hotel, killing a bystander.
Case details: On July 5, 2015, a man was in the lobby area of the Omni hotel, Austin TX, pacing back and forth, carrying a rifle. The man then suddenly shot a random bystander. When officers arrived, he exchanged shots with the responding officers throughout the hotel lobby. The shooter ultimately was shot and killed by a police officer.
Reference resource:

- http://www.dailymail.co.uk/news/article-3150396/Gunman-upscale-Austin-hotel-kills-man-5am-random-rifle-attack-shot-dead-police.html
- http://www.dallasnews.com/news/crime/headlines/20150706-austin-police-id-gunman-victim-at-sundays-hotel-shooting.ece

Discussion and exercise:
Assume you are an FLS Director of a hotel.

1. What information and knowledge should you share with the hotel staff during your periodic active shooter emergency preparedness training?

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2. Assume you are in a safe location. You are informed that a person is pacing around the lobby of the hotel with a rifle. What action should you take?

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3. You are in a safe location and are capable of making a notification to all the hotel occupants. What is the content of the notification you will make?

4. You are in a safe location. If the shooter starts to fire shots before police arrive, what action should you take? What is the content of the notification you will make, if it is safe to do so?

5. If you are aware of anyone who holds a firearm carry license, what should you do?

6. What information should you provide to the arriving police officers?

(2) Hotel case 2: 2005 Living Church of God shooting

Case summary: a shooter open fires at the Sheraton Hotel conference room, killing seven people.

Case details: On March 12, 2005, a shooter armed with a handgun, began shooting during a Living Church of God service at the Sheraton Hotel conference room in Brookfield, Wisconsin. Seven people were killed; four were wounded. The shooter committed suicide before police arrived.

Reference resource:

- A Study of Active Shooter Incidents, 2000 – 2013. U.S. *Department of Justice, Federal Bureau of Investigation*. September, 2013.

Discussion and exercise:

Assume you are an FLS Director of a hotel.

1. What information and knowledge should you share with the hotel staff during your periodic active shooter emergency preparedness training?

2. Assume you are in a safe location while the shooting is occurring in a conference room on 2nd floor of your hotel. What action should you take?

3. You are in a safe location and are capable of making a notification to all the hotel occupants. What is the content of the notification you will make?

4. If you are aware of anyone who holds a firearm carry license, what should you do?

5. What information should you provide to the arriving police officers?

(3) Hotel case 3: 2010 Muna hotel attack

Case summary: A group of three insurgents opened fire at the Muna Hotel in Somalia, killing roughly 30 people and injuring 16 others.

Case details: On August 24, 2010**,** a group of three insurgents arrived at the gate of Muna hotel in Somalia wearing government military uniforms. The shooters opened fire as soon as the hotel guards opened the way for them.

They then rushed into the hotel corridors, shooting everyone in sight. They targeted bystanders, hotel staff and armed guards. The insurgents moved throughout different floors in the hotel during the attack. Government forces arrived a few minutes later and battled the insurgents room by room, eventually pushing the shooters to the upper floor. According to witnesses, several lawmakers tried to lock themselves in their rooms, but they were hunted down and shot at close range with assault rifles.

The shooters killed at least 30 people, including 4 lawmakers.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- http://www.nytimes.com/2010/08/25/world/africa/25somalia.html

Discussion and exercise:

Assume you are an FLS Director of a hotel.

1. What information and knowledge should you share with the hotel staff during your periodic active shooter emergency preparedness training?

2. Assume you are in a safe location while the attack began in your hotel. Your staff indicated that there is a group of shooters firing automatic weapons on the ground floor of the hotel. What action should you take?

3. You are in a safe location and are capable of making a notification to all the hotel occupants. What is the content of the notification you will make?

   Note: Circumstances that should be covered:

   - Multiple shooters
   - Physical description of the shooters (e.g. clothing, weapons, etc.)
   - Shooters are trying to open hotel room doors

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4. If you are aware of anyone who holds a firearm carry license, what should you do?

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5. What information should you provide to the arriving police officers?

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18.4.2 Public assembly cases

(1) Public Assembly case 1: 2012 Colorado movie theater shooting

Case summary: A shooter set off tear gas grenades and shot into the audience of a Colorado movie theater. Twelve people were killed and more than 50 people were wounded.

Case details: On July 20, 2012, a shooter bought a ticket in a Colorado movie theater at a midnight showing of "The Dark Knight Rises". He sat down in Theater 9 on the ground floor to watch the film. 20 minutes later, he got up and slipped out through the emergency exit, using a plastic tablecloth holder to prop open the door to regain entry.

The shooter then went to his car, parked right by the door, and suited up in tactical gear and a gas mask. He armed himself with three guns - a shotgun, a semi-automatic rifle and a handgun.

About ten minutes later, he went back into the theater where hundreds of people thought his tactical clothing might be a part of the special effects for the film's premiere.

The shooter tossed a smoke canister before starting to fire shots. He shot at the audience in the theater; however, a bullet penetrated through the wall and hit people in the adjacent theater. As smoke overtook the air, panicking people dropped to the floor and crawled over one another to get out. Witness said the fire alarm system began sounding soon after the attack began. Staff told people in the adjacent theater to evacuate. One witness said she was hesitant to leave because a man yelled that someone was shooting in the lobby.

Police arrived within 90 seconds after the 911 calls. A police officer arrested the shooter behind the movie theater, next to the shooter's car without resistance.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.

- http://abc7.com/archive/8743134/
- http://www.wsj.com/articles/SB10000872396390444464304577538292604705890
- http://www.denverpost.com/2012/07/20/12-shot-dead-58-wounded-in-aurora-movie-theater-during-batman-premier/
- http://www.foxnews.com/us/2012/07/20/witnesses-to-batman-massacre-describe-terrifying-scene.html

Discussion and exercise:

Assume you are an FLS Director of a multiplex theater.

1. What information and knowledge should you share with the theater staff during your periodic active shooter emergency preparedness training?

2. During theater hours, an employee informs you that an emergency exit of a theater is propped open. What action should you take?

3. Before you take any correction for the emergency exit door, the fire alarm begins to sound, smoke is coming out from a theater and gunshots are heard from the same theater. The crowd starts panicking and self-evacuating. You are in a safe location. What action should you take?

4. You are in a safe location and are capable of making a notification to all the theater occupants. What is the content of the notification you will make?

5. If you are aware of anyone who holds a firearm carry license, what should you do?

6. What information should you provide to the arriving police officers?

(2) Public Assembly case 2: 2016 Irving Plaza shooting

Case summary: A shooting incident occurred in the third-floor VIP room during a concert at Irving Plaza, a 1,025-person ballroom-style music venue, in Manhattan, NY. One man was killed and three others were wounded (including the alleged shooter).

Case details: On May 25, 2016, a shooting incident occurred in the third-floor VIP room during a concert. Gun fire spilled into the area near the stage, causing panic among more than 1,000 audience members.

"There were people blocking each other using each other as shields," said a witness. "I was in the front of the stage ... I was just trying to find an exit to get the hell out."

There were metal detectors to screen audience members. The performers and the staff including the shooter were allowed to enter the VIP areas where the metal detector may not have been used.

The shooter was injured and exited as people fled the room. He was later arrested by the NYPD.

Reference resource:

- http://www.nytimes.com/2016/05/26/nyregion/people-are-shot-at-irving-plaza-during-ti-concert-police-say.html
- http://nypost.com/2016/05/25/three-shot-during-concert-at-irving-plaza/
- http://www.nydailynews.com/new-york/manhattan/nypd-close-arrest-deadly-shooting-irving-plaza-article-1.2650743

Discussion and exercise:

Assume you are an FLS Director of this concert venue.

1. What information and knowledge should you share with the venue staff during your periodic active shooter emergency preparedness training?

2. Assume you are in a safe location while gun shots were heard. The crowd starts panicking and self-evacuating. What actions should you take?

3. You are in a safe location and are capable of making a notification to all the venue occupants. What is the content of the notification you will make?

4. If you are aware of anyone who holds a firearm carry license, what should you do?

5. What information should you provide to the arriving police officers?

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(3) Public Assembly case 3: 2013 Westgate Shopping Mall attack

Case summary: Four shooters attacked Westgate Shopping Mall in Nairobi, Kenya. The attack resulted in at least 67 deaths (61 civilians and 6 security officers); more than 175 people were wounded in the mass shooting. This attack took almost four days before authorities declared the scene safe.

Case details: On 09/21/2013 at approximately 12:30 pm, four shooters attacked Westgate Shopping Mall, the most upscale shopping mall in Nairobi, Kenya, using rifles and hand grenades. Shooters stormed into the mall area, shooting people outside the five-story structure and then inside. Two of the shooters entered the mall through the main entrance, the other two making their way up the ramp to the rooftop parking garage. Four shooters shot at all bystanders including adults and children. Shoppers said they also heard grenades exploding.

The victims of this attack included males and females, ranging in age from 8 to 78 years old. The majority of these casualties probably occurred within the first hour of the attack.

During the beginning of the attack, a large number of plainclothes law enforcement and civilian armed personnel were present at the scene and actively assisted in evacuating the victims. Their presence created identification issues for uniformed Kenyan Police first responders.

Poor coordination and lack of effective communication between police and military commanders resulted in the military troops firing on members of the police tactical team, killing one officer and wounding the team commander.

Circumstances in this case:

There were multiple plainclothes law enforcement first responders conducting tactical and rescue operations during the first day of the attack. Very few of the plainclothes law enforcement first responders displayed visible law enforcement identification such as a badge, arm band, ID card or a raid jacket, making identification extremely difficult for other armed first responders.

Reference resource:

1. https://assets.documentcloud.org/documents/894158/westgate-report-for-shield-website.pdf
2. Terror at the Mall (2014). HBO documentary films.
3. http://www.cnn.com/2013/09/24/world/africa/kenya-mall-attack-timeline/

Discussion and exercise:

Assume you are an FLS Director of a large mall.

1. What information and knowledge should you share with the mall staff during your periodic active shooter emergency preparedness training?

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2. Assume you are in a safe location while the attack began in the mall. Your staff indicated that there were two groups of shooters firing automatic weapons on the ground floor and the rooftop. What actions should you take?

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3. You are in a safe location and are capable of making a notification to all the occupants. What is the content of the notification you will make?

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4. If you are aware of anyone who holds a firearm carry license, what should you do?

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5. What information should you provide to the arriving police officers?

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18.4.3 University cases

(1) ***University case 1: 2007 Virginia Tech shooting*** *(highly recommended case study for the FLS Director working in University or a complex of several commercial buildings.)*

Case summary: A Virginia Polytechnic Institute student, opened fire inside a university dormitory and in several classrooms, killing 32 people and wounding 20 others. He committed suicide after the attack.

Case details: On April 16, 2007, a shooter shot and killed two people in a residence hall of Virginia Polytechnic Institute and State University shortly after 7:00 a.m. He then returned to his own residence hall. While police and emergency medical services units were responding to the shootings in the dorm next door, the shooter changed out of his bloodstained clothes.

About two hours after the initial shooting, the shooter entered another building. He chained the three main entrance doors shut. He placed a note on at least one of the chained doors, claiming that attempts to open the door would cause a bomb to explode. A few students came into contact with the chains on their way in, and, assuming it was construction, crawled in through a ground floor window. Shortly before the shooting began, a faculty member found the bomb threat note and took it to the building's third floor to notify the school's administration. At about the same time the shooter had begun to shoot students and faculty on the second floor. The bomb threat was never reported to the first responders.

At about 9:40 a.m., the shooter began shooting. After hearing shooting in a classroom, many professors and students in other classrooms tried to barricade the classrooms. However, the classrooms were only furnished with

lightweight desk-chair combinations and an instructor table. The doors were not lockable from the inside, so the shooter pushed his way in.

In other classrooms, people who braced their bodies against the door were killed because the shooter shot through the classroom doors. However, students in two different classrooms used a different strategy to save their lives: they held the door shut with their feet and hands, keeping their bodies away and staying low. The shooter could not get into the rooms and no one got hurt when he fired through the door.

Hearing the commotion on the floor below, a professor took twenty students from a third-floor classroom into his office where the door could be locked. He then went downstairs to investigate and was shot and killed by the shooter. None of the students locked in the professor's office were harmed.

Approximately ten to twelve minutes after the second attack began, almost immediately after hearing the blast of the police shotgun that took the lock off the door, the shooter killed himself. During this second assault, the shooter had fired at least 174 shots, killing 30 people and wounding 20 people.

Circumstances that should be addressed during the discussion:

1. **All-campus notification was not made promptly.**

   After the first attack, the Virginia Tech Police Department (VTPD) may have prematurely reported to the responsible safety personnel that the suspect probably was no longer on campus. The responsible safety personnel focused on preventing a panic on campus. They did not alert the entire campus about this dangerous situation.

   Shortly before 9:30 a.m., the Virginia Tech community—faculty, staff, and students—were notified by e-mail as follows:

   "*A shooting incident occurred at West Ambler Johnston earlier this morning. Police are on the scene and are investigating. The university community is urged to be cautious and are asked to contact Virginia Tech Police if you observe anything suspicious or with information on the case. Contact Virginia Tech Police at 231–6411. Stay tuned to the www.vt.edu. We will post as soon as we have more information*"

   This message did not accurately describe the danger that was still occurring and that the killer had not been apprehended. The message may lead the readers to assume that the shooting may be an accident and the shooter is not a threat since police are already on the scene.

   If the warning was made earlier and clearer, there may have been more people on guard. It could have resulted in quicker recognition of a problem or suspicious activity, quicker reporting to the police, and quicker response of the police.

2. **The staff and students did not receive proper training:**
   (1) The chained doors were not reported.
   The students who noticed the chained doors should have reported it to the responsible school safety personnel. Considering the incident happened in the dormitory, the responsible school safety personnel should report to the police promptly.
   (2) Bomb threat was not taken seriously.
   The faculty member, who noticed the bomb threat, should have immediately called 911 when the bomb threat was found.
   (3) The actions taken during shootings may not be effective.
   The students, faculty and staff should be provided with proper training regarding A-B-C tactics. They should know that if they have a way out, they should try to avoid as soon as possible. Some students escaped by jumping from windows. All who jumped survived, some with broken bones, some uninjured except for scratches or bruises. Some survivors did the optimum window escape, lowering themselves from the window sill to drop to the ground, reducing the fall by their body

length. People should not brace whole body against the door. If the only means available to barricade the door is with your body, attempt to stay lower than average waist level to avoid any shot fired through the door by the shooter.

The professor who brought his students into his office should have stayed in a safe place instead of approaching the scene.

Reference resource:

- Virginia Tech Review Panel, "Report of the Virginia Tech Review Panel,"

  https://governor.virginia.gov/media/3772/fullreport.pdf
- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- *http://www.changemag.org/Archives/Back%20Issues/January-February%202008/full-connecting-the-dots.html*
- *https://www.policeone.com/school-violence/articles/1473536-Lessons-learned-at-Virginia-Tech-shooting/*

Discussion and exercise:

Assume you are an FLS Director of a university containing multi-buildings on campus.

1. What information and knowledge should you share with the university students, professors and staff during your periodic active shooter emergency preparedness training?

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2. Assume you are in a safe location while the first attack began and the attack was in Dormitory ABC. You are informed that there was a shooting in a dormitory and two dead bodies were found. No one is sure who and where the shooter(s) is/are. What actions should you take? What is the content of the notification you will make?

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3. You are informed that there is a bomb threat in Building X. What actions should you take?

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4. Assume you are in a safe location while the second shooting began on the 2nd floor of Building K. What actions should you take? What is the content of the notification you will make?

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5. If you are aware of anyone who holds a firearm carry license, what should you do?

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6. What information should you provide to the arriving police officers?

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(2) University case 2: 2008 Northern Illinois University shooting

Case summary: A former graduate student at Northern Illinois University, opened fire in a university lecture hall, killing five people. The shooter committed suicide before police arrived.

Case details: On 2/14/2008, at approximately at 3:05 p.m., a shooter carried his weapons onto the campus in a guitar case and entered a large auditorium-style lecture hall on the campus of Northern Illinois University where a class was in session. The shooter shot at the instructor and then at students sitting in the front row. After firing nearly 60 shots, the shooter then returned to the stage and committed suicide. Officers responded to gunfire in the hall at approximately at 3:06 p.m. The officers immediately placed campus on lockdown. A campus alert went out at 3:20 p.m.: "There has been a report of a possible gunman on campus. Get to a safe area and take precautions until given the all clear. Avoid the King Commons and all buildings in that vicinity."

In the *report of the February 14, 2008 shootings at Northern Illinois University*, it addressed the importance of alternative communication system in addition to landline telephones and cell phones. Traditional communication systems become overloaded almost immediately. An alternative system, like hand-held radios, will allow for continued communication with the FLS brigades and with other key school staff. The report also suggested using social network sites, such as Facebook and twitter to reach out to the students.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- *Report of the February 14, 2008 shootings at Northern Illinois University* http://www.niu.edu/feb14report/Feb14report.pdf

Discussion and exercise:

Assume you are an FLS Director of a university containing multi-buildings on campus.

1. What information and knowledge should you share with the university students, professors and staff during your periodic active shooter emergency preparedness training?

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2. Assume you are in a safe location while the attack began. You are informed that there was a shooting in a lecture hall. What action should you take?

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3. Assume the attack happened in a Lecture Hall Y. You are in a safe location and are capable of making a notification to all the campus occupants. What is the content of the notification you will make?

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4. If you are aware of anyone who holds a firearm carry license, what should you do?

5. What information should you provide to the arriving police officers?

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(2) University case 3: 2012 Oikos University shooting (single-building campus)

Case summary: A shooter opened fire at Oikos University in Oakland, California, killing seven students and wounding three others. The shooter later surrendered at a supermarket in nearby Alameda city.

Case description: On 04/02/2012, around 10:30 a.m., a group of nursing students were taking a test at Oikos University in Oakland, California when a rear door swung open and a former student entered- one arm clamped around the school's receptionist, the other clutching a pistol.

"Everybody to the front of the class," ordered the shooter. He ordered classmates to line up against the wall. "Get in line! I'm going to kill you all!" said the shooter before opening fire. Then the shooter fired his handgun, fatally wounding the school receptionist. The shooting set off panic, with students fleeing in all directions. The shooter kept firing, killing 7 people and injuring 3.

When the first gunshot rang, students in the next classroom did not immediately sense danger. They thought it was a firecracker. Then a rapid burst followed "pow pow pow pow". The students finally recognized the sounds as gunshots. A student sat next to the classroom door jumped up and locked it. A student dialed 911. Some students hid under their desks. Others pressed into the far corners of the dark room.

One student texted his mother: "There's a shooting here call 911." Seconds later, his phone rang in the silent room. It was his mother calling back. "I pressed it to vibrate as fast as I could," the student said. After students heard more gunfire, the shooter wiggled the locked classroom's door handle, kicked at the door. Three or four shots blasted through the door, shattering the window. The shooter then left without entering the locked classroom.

The first 911 calls had come in at 10:33 a.m. just moments after the first shots were fired. Police arrived three minutes later. The shooter left the school before police arrived. Hours later, the shooter surrendered to authorities at a supermarket about five miles away from the scene of the shooting.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012.
- http://abc7news.com/archive/8604893/
- http://www.activeresponsetraining.net/9-lessons-learned-from-the-oikos-college-shooting
- http://sanfrancisco.cbslocal.com/2012/04/03/oikos-university-student-locked-door-saved-our-lives/
- http://www.sfgate.com/crime/article/Oakland-school-shootings-remembering-Oikos-3466879.php

Discussion and exercise:

Assume you are an FLS Director of a single-building university.

1. What information and knowledge should you share with the university students, professors and staff during your periodic active shooter emergency preparedness training?

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2. Assume you are in a safe location while the attack began. You are informed that there was shooting in a classroom A. What action should you take?

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3. You are in a safe location and are capable of making a notification to all the building occupants. What is the content of the notification you will make?

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4. If you are aware of anyone who holds a firearm carry license, what should you do?

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5. What information should you provide to the arriving police officers?

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18.4.4 Office building cases

(1) Office buildings case 1: 2008 Silicon Valley office shooting

Case summary: On November 14, 2008, a shooter opened fire at his former workplace, killing three people, including the CEO. The shooter was later arrested by the police.

Case details: The workplace is a suite inside an office building in an office park in Santa Clara, California. The shooter had been fired hours prior to the attack and returned to the office to request a meeting with company officials. He shot and killed all three victims during the meeting and fled the area in an SUV. When police responded to the scene, the police were not sure if the shooter was still in the office park or not. The next morning, police arrested him on a public road.

Note for office building shooting incidents:

It is very typical for active shooter cases to occur in office buildings. This type of workplace violence involves a violent act by a current or former employee who has a dispute with one of the employees. The FLS Director and security manager should be notified in advance of terminations and other situations that have a potential for aggressive behavior. Awareness and cooperation of public safety, management, supervisors and all other employees is critical to reduce the threat of violence.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- http://www.cbsnews.com/news/triple-murder-stuns-silicon-valley-firm/

Discussion and exercise:

Assume you are an FLS Director of an office building.

1. What information and knowledge should you share with the building occupants during your periodic active shooter emergency preparedness training?

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2. Assume you are in a safe location while the attack began. You are informed that there was a shooting in a meeting room. What action should you take?

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3. Assume the suite is room 401 on 4th floor in your building. You are in a safe location and are capable of making a notification to all the building occupants. What is the content of the notification you will make?

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4. If you are aware of anyone who holds a firearm carry license, what should you do?

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5. What information should you provide to the arriving police officers?

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(2) <u>Office buildings case 2: 1999 Atlanta office shooting</u>

Case summary: A shooter opened fire at two brokerage offices, including one where he was formerly employed, killing nine people and wounding 12 others. Prior to the attack, the shooter killed his wife and two children at their home with a hammer. Reports state that he had lost more than $400,000 on his investments shortly before the attacks.

Case details: On 07/29/1999, the shooter went to the offices of his former employer, Momentum Securities. Witnesses say that the shooter briefly chatted with coworkers before suddenly pulling out two pistols and opening fire. He shot and killed four people.

An employee, who was in Momentum Securities when the shooting broke out, said he also called 911, but was put on hold the first time and had to call again. He and another friend had tipped over a desk and barricaded themselves in a back office when shots rang out. The shooter tried to force the door open and then fired two shots through the door, one of which missed the friend by 3 inches. After calling police, they threw a computer terminal through the third-floor office window to create a potential escape route that police later used as a way to get into the building.

The shooter then walked to the nearby All-Tech Investment Group building and murdered five more people. The shooter then left the scene before police could arrive.

The shooter killed himself as he was being pulled over by police, about 6 hours after the shooting spree began.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- http://www.cnn.com/US/9907/29/atlanta.shooting.04/
- http://www.cnn.com/US/9907/30/atlanta.shooting.08/

Discussion and exercise:

1. Assume you are an FLS Director of an office building. What information and knowledge should you share with the building occupants during your periodic active shooter emergency preparedness training?

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2. Assume you are an FLS Director of the first office building and you are informed that there is a shooting on third floor. What action should you take?

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3. Assume you are an FLS Director of the first office building; you are in a safe location and are capable of making a notification to all the office occupants. What is the content of the notification you will make?

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4. Assume you are an FLS Director of the first office building, what information should you provide to the arriving police officers?

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5. If you are aware of anyone who holds a firearm carry license, what should you do?

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6. Assume you are an FLS Director of another office building and you are informed that there is a shooting in a nearby Building B. What action should you take? What is the content of the notification you will make?

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(3) Office buildings case 3: 2010 Las Vegas courthouse shooting

Case Summary: A shooter opened fire in the lobby of a federal courthouse, killing a security officer and wounding a deputy United States Marshal. He was fatally shot by police.

Case details: On 01/04/2010, a shooter pulled a shotgun from underneath his coat and started firing indiscriminately from outside the security areas where visitors pass through metal detectors and x-ray machines. There are offices for senators and judges in the same office building.

The shooter was fatally shot by police while running away. Reports state that the shooter was disgruntled over a reduction of his Social Security benefits.

For several hours after the shooting, local television stations broadcasted what turned out to be false reports of other shooters on the loose, which led to evacuations in the commercial area surrounding the courthouse.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- http://www.nytimes.com/2010/01/05/us/05vegas.html?_r=0

Discussion and exercise:

Assume you are an FLS Director of an office building.

1. What information and knowledge should you share with the building occupants during your periodic active shooter emergency preparedness training?

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2. Assume you are in a safe location while the shooting begins in the lobby and the Fire Command Center is not compromised. What action should you take?

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3. You are in a safe location and are capable of making a notification to all the building occupants. What is the content of the notification you will make?

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4. If you are aware of anyone who holds a firearm carry license, what should you do?

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5. What information should you provide to the arriving police officers?

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6. Assume you are an FLS Director of another commercial building surrounding the courthouse. You hear the local news stating that the shooter may be on the loose. What action should you take? What is the content of the notification you will make?

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18.4.5 Cases where civilians helped to stop shootings or prevent further injuries

This booklet provides real active shooter cases where civilians took actions to stop shootings or to prevent further injuries. The instructor **must go through all of these cases** to have an open discussion with the students.

(1) Case 1: 2011 Tucson shooting (supermarket parking lot)

Case summary: A shooter opened fire into a crowd of people outside a Safeway supermarket where Representative Gabrielle Giffords was holding a constituent meeting, killing six people and wounding 13 others.

Case details: On 01/08/2011, a shooter opened fire into a crowd of people outside a Safeway supermarket where an elected official (Gabrielle Giffords) was holding a constituent meeting. After shooting her, the shooter proceeded to fire apparently randomly at other members of the crowd. When the shooter stopped to reload, he dropped the loaded magazine from his pocket to the sidewalk. A bystander, Patricia Maisch, 61, wrestled the magazine away. Several men then pounced on the shooter and threw the shooter to the ground. Another bystander clubbed the back of the shooter's head with a folding chair. These actions stopped the shooting. Police arrived on the scene at 4 minutes after the first 911 call.

Reference resource:

- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- http://abcnews.go.com/Politics/patricia-maisch-describes-stopping-gunman-reloading/story?id=12577933

Discussion and exercise:

What part of ABC tactics does this case emphasize?

---

(2) Case 2: 2016 UCLA shooting

Case summary: A shooter opened fire in a murder-suicide at UCLA. Two men (including the shooter) were killed.

Case details: On 06/01/2016, a shooting occurred at a fourth-floor office in an academic building of UCLA.

Immediately after the shooting, a professor held the victim's office door shut after hearing two gunshots come from the office. The professor also told everybody to stay inside and lock the door. The professor was credited for potentially saving lives during the shooting.

> ***NOTE**: FDNY does not recommend that civilians hold doors by hand or block doors with bodies. People should find furniture or tools to stop doors from opening.*

A campus-wide alert to avoid the area was issued via UCLA's BruinAlert system immediately. The BruinAlert is UCLA's campus wide emergency mass notification system. It works on a self-subscription basis for receiving text messages, and all students with a valid email address are automatically enrolled in the email updates. The alert stated, "*Shooting at Engineering 4. Go to secure location and deny entry (lockdown) now*!" Los Angeles Police Department officers arrived at the building about 4 minutes after the alert was sent. The campus-wide alert urged everyone to find shelter and lock the door until police could secure the campus.

CNN reports some emergency responses that UCLA staff and students took:

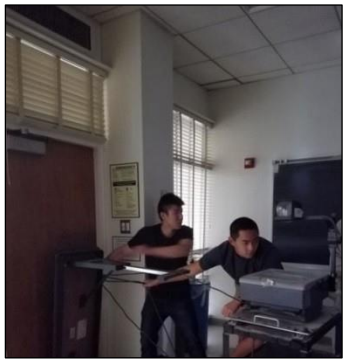
> *About 120 other students were in an auditorium classroom on the UCLA campus when cellphones started buzzing with news of the emergency.*
>
> *Students raced to close the doors to the large room. They were stuck open, unable to be closed without an Allen wrench. They ran down a hallway to a file storage room where they could lock the door. For extra safety, they pushed a table in front of the door.*
>
> *Another group of students were in one of those rooms where the door opened out so once they understood the gravity of the situation they began searching on the internet for "How to lock a swinging door."*
>
> *Someone suggested tying a projector cord to the door handle. Then they tied that to a chair that was bolted to the floor.*

Ninety minutes later the students received the all clear message. Another student said that initially her class was in a room where the door couldn't be locked, so the professor and the teaching assistant led them to a place more secure.

Even with the door locked, they decided to make it more secure. A student donated her belt as did another student, and a man in their class bound the hinge so it wouldn't open.

Example of using belt to stop a door from opening

ABC news also cited UCLA students' twitter posts to show how they barricaded themselves when they were unable to lock classroom doors:



Two handguns and a suicide note were later found near the two bodies. Shortly after the shooting, police sources told the Los Angeles Times that from the appearance of the bodies, a student may have killed a professor. At least three shots were fired in the shooting.

Reference resource:

- http://www.cnn.com/2016/06/02/us/ucla-active-shooter-preparation/
- http://abcnews.go.com/US/classroom-doors-lock-add-ucla-shooting-scare/story?id=39555158
- http://www.latimes.com/local/education/la-me-ln-ucla-shooting-account-klug-sarkar-20160603-snap-story.html

Discussion and exercise:

What part of ABC tactics does this case emphasize?

18.4.6 Reference materials

- Active Shooter. *NYPD Shield.* Accessed 2/17/2015.
- Active Shooter: Recommendations and Analysis for Risk Mitigation. *The New York City Police Department.* 2012. Accessed 2/17/2015.
- Active Shooter: How to Response. *U.S. Department of Homeland Security*. Accessed 2/17/2015.
- Incorporating Active Shooter Incident Planning Into Health Care Facility Emergency Operations Plans. *U.S. Department of Health and Human Services. 2014.* Accessed 3/11/2015.
- A Study of Active Shooter Incidents, 2000 – 2013. U.S. *Department of Justice, Federal Bureau of Investigation*. September, 2013. Accessed 2/17/2015.
- Garris, L. G. Preparing for the Worst: How to Plan for an Active Shooter Scenario. *The BOMA Magazine.* Accessed 2/17/2015.
- Active Shooter Preparedness. *U.S. Department of Homeland Security*. Accessed 3/4/2015.
- *U.S. Department of Education, Office of Postsecondary Education*. The Handbook for Campus Safety and Security Reporting (2016 Edition). Washington, D.C., 2016.

Chapter 19. MEDICAL EMERGENCY PREPAREDNESS

According to a study published in *Canadian Medical Association Journal*, residents of high-rise buildings had greater survival rates from cardiac arrests on the lower floors (3rd floor or below). Of Patients who had cardiac arrests in private residences and were treated by 911 first responders, 4.2% of the people living at or below the 3rd floor survived to be discharged from hospital but only 2.6% of the people living above the 3rd floor survived. In an analysis by floor, survival was 0.9% above floor 16 (i.e., below the 1% threshold for futility), and there were no survivors above the 25th floor.

Another study published in Academic Emergency Medicine (AEM) Journal analyzing FDNY EMS paramedic units response time (from arrival on-scene to the patient), indicates that for office, apartment, or other buildings ten stories or higher, the on-scene to patient median time interval was 3.2 minutes compared with 2.3 minutes for buildings three to ten stories in height. In this study, 53.2% of cases were provided with one or more escorts. The assistance included opening a locked outer building door, securing an elevator and directing or escorting EMS personnel to the patient. Delays in reaching the patient trended to reduction by the presence of an escort on-scene.

Researchers outline several solutions to improve time to patient contact, such as giving 911-initiated first responders sole access to elevators for emergency service without public interference, similar to the access of firefighters during a fire; emergency alerts to building staff before arrival of the first responders; and better placement of defibrillators to increase bystander use.

19.1 Medical emergency preparedness

2014 Fire Code requires all Comprehensive Fire Safety and Emergency Action Plans to address the coordination of the emergency response to a medical emergency at the premises. The Comprehensive Fire Safety and Emergency Action Plan must provide the procedures for coordinating with firefighting, emergency medical service and other emergency response personnel. The plan also should identify any persons on the premises who are qualified and willing to provide cardio-pulmonary resuscitation or other emergency medical care to building occupants upon notification by the FLS Director. However, a building owner is not required to establish or train an emergency medical response team, but only to invite CPR-trained or other qualified persons working at the premises to volunteer to be contacted in the event of a medical emergency on the premises, and to establish a procedure by which they can be notified (such as a text or call). The volunteer's unavailability, untimely response, or unwillingness to respond to a notification of a medical emergency does not constitute a breach of the owner's or the emergency preparedness staff's obligations under this rule.

FLS Directors are neither expected nor required to personally provide patient care, as their duties as FLS Director require them to remain at the Fire Command Center during an emergency. But the FLS Director and other FLS staff must be familiar with the medical emergency procedures listed in the building Comprehensive Fire Safety and Emergency Action Plan. All FLS staff must also be familiar with the location(s) of defibrillators or other medical equipment for medical emergencies.

AED
(Automated External Defibrillator)

The building occupants must be trained or informed that they must call 911 in case of any medical emergency. In addition, they must be trained or informed that after calling 911, they have to also notify FLS Director or other designated FLS staff of medical emergencies on the premises. The emergency contact information (including how to reach 911 and the designated FLS staff phone number, etc.) should be provided to every building occupant.

Reference material:

- Ian R. Drennan, Ryan P. Strum, Adam Byers, Jason E. Buick, Steve Lin, Sheldon Cheskes, Samantha Hu, Laurie J. Morrison, for the Rescu Investigators. **Out-of-hospital cardiac arrest in high-rise buildings: delays to patient care and effect on survival.** CMAJ, January 2016 http://www.cmaj.ca/content/188/6/413
- Cardiac arrests in high-rise buildings: Low survival rates above 3rd floor

  https://www.sciencedaily.com/releases/2016/01/160118134426.htm
- Living above the third-floor drastically reduces your chances of surviving cardiac arrest, study suggests

  http://news.nationalpost.com/news/canada/highrise-heart-attacks
- Silverman RA1, Galea S, Blaney S, Freese J, Prezant DJ, Park R, Pahk R, Caron D, Yoon S, Epstein J, Richmond NJ. **The ''Vertical Response Time'': Barriers to Ambulance Response in an Urban Area.** Acad Emerg Med. 2007, Sep;14(9):772-8. http://onlinelibrary.wiley.com/doi/10.1111/j.1553-2712.2007.tb02350.x/pdf

19.2 Medical emergency response

In the event of a medical emergency in the building, the FLS Director must report to the Fire Command Center or designated alternative location.

The FLS Director or other designated FLS staff must call 911 to ensure that the medical emergency has been reported to the NYC 911 system. The caller is required to provide the following information to the 911 operator:

i. The address of the appropriate building entrance or other location at which emergency responders will be met by FLS Director or other designated FLS staff
ii. Caller's name and telephone number for a return call
iii. The number and the location of victim/patient
iv. The general description of the victim/patient's complaint or present condition (e.g. bleeding, breathing erratically, conscious/unconscious, etc.)
v. Any hazards involved

The caller must follow the exact instructions of the 911 operator.

After calling 911, the FLS Director must designate an FLS staff to meet emergency responders; the designated FLS staff must guide the emergency responders to the exact location of the victim/patient. The FLS Director also must designate FLS staff to respond to victim/patient location to control the access to the scene, to investigate and report to the FLS Director.

FLS staff should make a notification to CPR-trained volunteers listed in the plan and request to provide assistance (when appropriate). Only trained employees should provide first aid assistance. If there are no trained employees on the premises, designate a responsible person to stay with the victim/patient. The victim/patient should not be moved by untrained personnel, unless the victim/patient's location is unsafe.

If the victim/patient is not on street level, FLS Director should decide which elevator(s) can fit the stretcher and provide easy access to the victim/patient. The elevator(s) should be recalled and be switched to the independent/manual mode (not the Phase II) prior to arrival of emergency responders. The recalled elevator(s) must be held for emergency responder use only.

The FDNY recommends that the FLS Director to make an announcement to the building occupants for the recall of elevator. Sample script of the announcement:

"Attention! Elevator bank A is currently not available due to medical emergency. "

19.3 Medical emergency scenario

FLS Director training schools must discuss the following scenario with the FLS Director students.

Day and Time: Friday, at 8:00 PM

Location: rooftop restaurant in your building

Weather: Extreme heat, 90 degrees Fahrenheit with high humidity

Scenario:

An outdoor birthday party started at 6:30 PM on the rooftop of a restaurant. The birthday party attendees have been drinking alcohol since their arrival, and the humidity on the outdoor patio is extremely high.

A member of the birthday party, a middle aged woman, has collapsed to the ground and appears to be unconscious and unresponsive. Another member of the party yells for help and begins telling those around that the woman has a heart condition.

A building staff member observed the entire incident and informs you of all the details.

Assume you are the current FLS Director on duty, what actions should you take?

Recommend actions:

- Report to the Fire Command Center
- Call 911 and provide the following information:
  - A woman fell and appears to be unconscious and unresponsive.
  - The address of the appropriate building entrance that the designated FLS staff will meet the emergency responders.
  - The woman is in the building rooftop restaurant.
  - Your contact information.
  - The woman may have a heart condition and she has been consuming alcohol.
- Follow the exact instructions of the 911 operator.
- Report to the Fire Command Center.
- Notify CPR-trained volunteers listed in the plan and request to provide assistance.
- Designate FLS staff to control access to the patient location, prevent any unnecessary people from joining the scene.
- Designate FLS staff to meet the ambulance and other emergency responders at the entrance mentioned in the 911 call.
- Recall an elevator to street level and hold the elevator for emergency responder use only. Make announcement to the occupants: "*Attention! Elevator bank A is currently not available due to medical emergency.*"

PART V. ON-SITE EXAM

Part V provides a general guideline regarding the on-site exam. However, the on-site exam may also include other building/premises specific questions related to building system, fire or other life safety issues. As an FLS Director candidate, it is your responsibility to be fully familiar with your critical building systems, fire protection systems, Building Information Cards and the FDNY plan. The FLS Director should also be familiar with all FDNY requirements that mentioned in this booklet.

The On-Site Exam consists of 11 sections and will be administered by the following order:

Section 1: Building portion-general building knowledge

Section 2: Building portion-building knowledge related to fire safety

Section 3: Building portion-building knowledge related to Comprehensive Plan

Section 4: FLS staff training

Section 5: Building occupants training for active shooter incident

Section 6: 30 minutes break

Section 7: Fire scenarios

Section 8: Building scenarios

Section 9: Non-fire scenarios

Section 10: Demonstration portion- Fire Command Center

Section 11: Demonstration portion- elevator procedures

These sections are divided into three components:

- **General Building Knowledge Component:** Section 1, 2, 4, 10, and 11. (Chapter 20 of this booklet)
- **Fire Component**: Section 7 and 8. (Chapter 21 of this booklet)
- **Non-fire Component**: Section 3, 5 and 9. (Chapter 22 of this booklet)

20. GENERAL BUILDING KNOWLEDGE COMPONENT

20.1 Building portion-general building knowledge

The answers given in this section are scored based on the Building Information Card (BIC) and the FDNY Plan. If the candidate is aware of any changes in the BIC or the FDNY Plan, the candidate **must inform the inspector before the On-Site Exam begins**.

Candidates will be required to answer site specific questions regarding the following topics:

1. The information from the Building Information Card:
   (1) Building Information
   (2) Building Statistics
   (3) Stairways
   (4) Elevators
   (5) Ventilation
   (6) Utilities
   (7) Fire Protection systems

(8) Hazardous Materials

(9) Communications

2. The information from the FDNY plan of the candidate's building **including but NOT LIMITED to** :

(1) General description of the building (e.g. daytime and nighttime populations, business hours, no. of stories, etc.)

(2) Stairways information

Examples: Are there scissor stairs in the building (if yes, locations)? Are there any reentry floors(if yes, locations)? Fail safe or door release equipment (if yes, locations)?

(3) Elevators

Examples:

- Elevators that possess two-way communication.
- The title of the staff member who will operate the elevators in Manual / Independent mode.

(4) Utilities information

Examples:

- If the building has Steam &/or Natural Gas Service
    - The location of entry into the building & the location of the shut-offs.
- If there is any uninterruptible power supply (UPS) battery system and/or Energy Storage System (EES) in the building.
    - The location(s) of the battery system(s)
- If there are any day tanks within the building, capacity & location.

(5) HVAC information

- Supply fan information
- Purge system capability
- The title and name of the person to operate the HVAC system

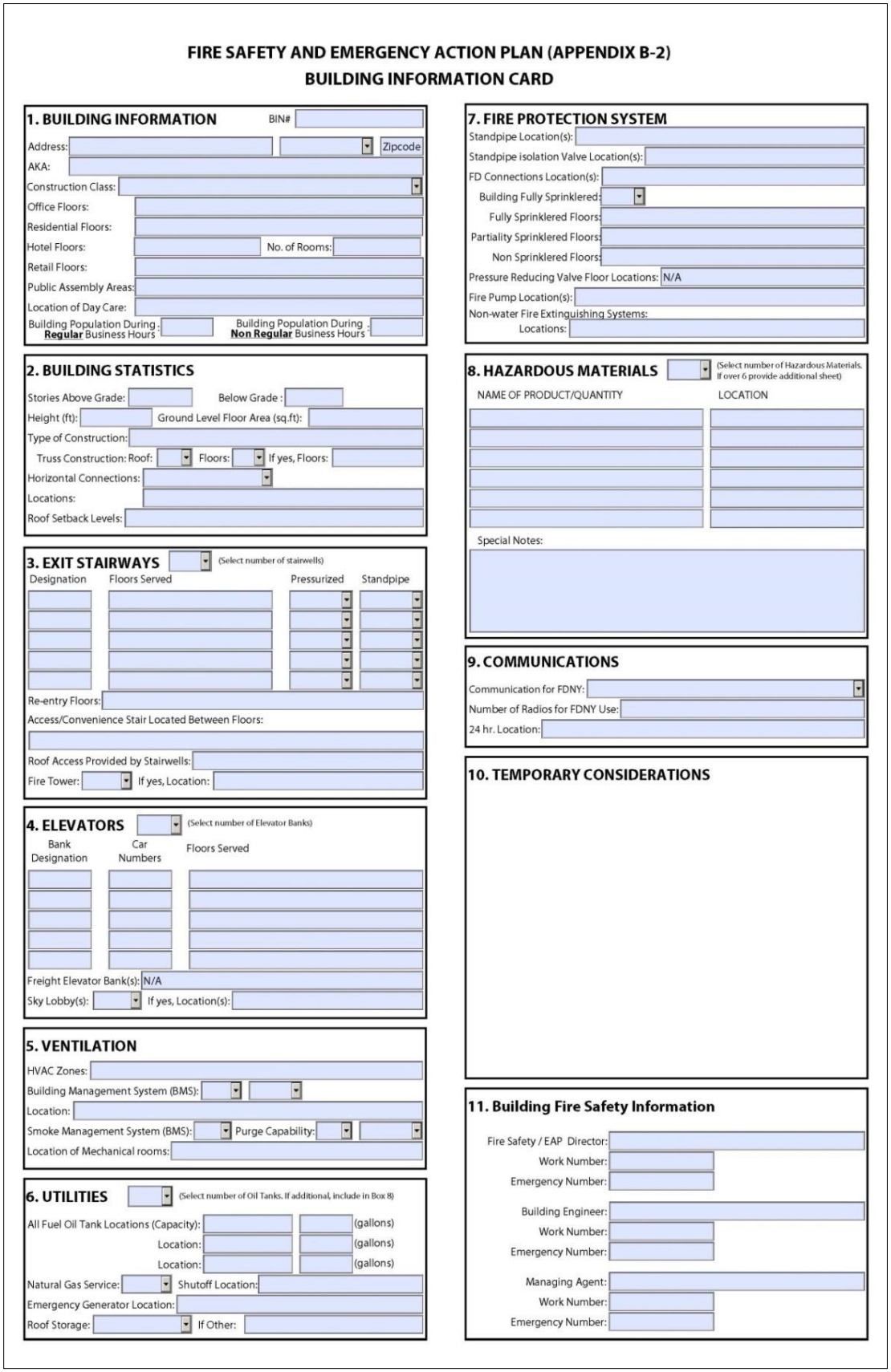
(6) Required drill frequency

(7) Procedure for assisting people in need during an emergency

- Providing list of occupants who have requested assistance

(8) Alternate site for command (If the Fire Command Center is compromised).

The Information from the Building Information Card



FIRE SAFETY AND EMERGENCY ACTION PLAN (APPENDIX B-2)
BUILDING INFORMATION CARD

1. BUILDING INFORMATION BIN#
Address: Zipcode
AKA:
Construction Class:
Office Floors:
Residential Floors:
Hotel Floors: No. of Rooms:
Retail Floors:
Public Assembly Areas:
Location of Day Care:
Building Population During **Regular** Business Hours
Building Population During **Non Regular** Business Hours

2. BUILDING STATISTICS
Stories Above Grade: Below Grade :
Height (ft): Ground Level Floor Area (sq.ft):
Type of Construction:
Truss Construction: Roof: Floors: If yes, Floors:
Horizontal Connections:
Locations:
Roof Setback Levels:

3. EXIT STAIRWAYS (Select number of stairwells)
Designation | Floors Served | Pressurized | Standpipe
Re-entry Floors:
Access/Convenience Stair Located Between Floors:
Roof Access Provided by Stairwells:
Fire Tower: If yes, Location:

4. ELEVATORS (Select number of Elevator Banks)
Bank Designation | Car Numbers | Floors Served
Freight Elevator Bank(s): N/A
Sky Lobby(s): If yes, Location(s):

5. VENTILATION
HVAC Zones:
Building Management System (BMS):
Location:
Smoke Management System (BMS): Purge Capability:
Location of Mechanical rooms:

6. UTILITIES (Select number of Oil Tanks. If additional, include in Box 8)
All Fuel Oil Tank Locations (Capacity): (gallons)
Location: (gallons)
Location: (gallons)
Natural Gas Service: Shutoff Location:
Emergency Generator Location:
Roof Storage: If Other:

7. FIRE PROTECTION SYSTEM
Standpipe Location(s):
Standpipe isolation Valve Location(s):
FD Connections Location(s):
Building Fully Sprinklered:
Fully Sprinklered Floors:
Partiality Sprinklered Floors:
Non Sprinklered Floors:
Pressure Reducing Valve Floor Locations: N/A
Fire Pump Location(s):
Non-water Fire Extinguishing Systems:
Locations:

8. HAZARDOUS MATERIALS (Select number of Hazardous Materials. If over 6 provide additional sheet)
NAME OF PRODUCT/QUANTITY | LOCATION
Special Notes:

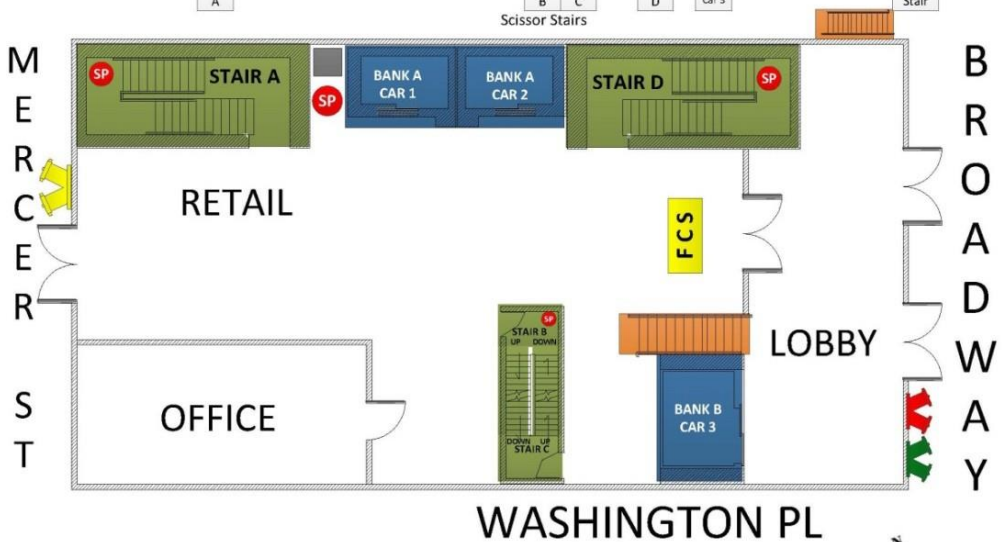
9. COMMUNICATIONS
Communication for FDNY:
Number of Radios for FDNY Use:
24 hr. Location:

10. TEMPORARY CONSIDERATIONS

11. Building Fire Safety Information
Fire Safety / EAP Director:
Work Number:
Emergency Number:
Building Engineer:
Work Number:
Emergency Number:
Managing Agent:
Work Number:
Emergency Number:

APPENDIX B-2
BUILDING INFORMATION CARD

Insert Address Here



	Elevator	MER	Mechanical Equipment Room	SP	Standpipe Outlet
	Elevator Blind Shaft	EMR	Elevator Machine Room		Standpipe Connection
	Stair	FCS	Fire Command Station		Sprinkler Connection
	Convenience / Access Stair		Linen / Trash/ Utility Chute		Combination Connection

20.2 Building portion- Building Knowledge Related to Fire Safety

Candidates will be required to answer site specific questions regarding the following topics from the FDNY plan of the candidate's building **including but not limited** to :

(1) Standpipe systems

(2) Sprinkler systems

(3) Other extinguishing systems

(4) Portable Fire Extinguishers

(5) Other special features of the premises

20.3 FLS staff training

During the On-Site Exam, all FLS Director candidates will be required to present an initial training session for one of the following staff members:

(1) FLS brigade members (for hotel buildings and office buildings);

(2) FLS building evacuation supervisors (only for office buildings);

(3) FLS floor warden (only for office buildings).

The staff member will be designated by the FDNY inspector upon the On-Site Exam.

During this test segment, the candidate must assume that the inspector is a new employee. This new employee does not have any knowledge of the building. The candidate can only show his/her training knowledge verbally during the On-Site Exam, the candidate must describe any required information specifically and clearly.

Below are two examples; the first is an example of a poorly executed training segment. The second is a properly executed training segment.

For this example we will assume that the staff member being trained must be taught information about the elevator(s) location and floors served.

- Bad example: NO CREDIT

The candidate said, "*I will show you where the elevator lobby is located* and which floors each elevator serves."

- Good example: CREDIT

The candidate said, "*You need to know the location of the elevator lobby. It is located on the right hand side of the front entrance reception desk. The first two elevators serve from the ground floor to the roof and the last elevator serves from basement to the 7th floor."*

The candidate should be detailed in the training, so that way, upon completion of the training, the trainee would be able to proficiently perform their duties in case of an emergency.

Candidate will be given 10 minutes to prepare for this assignment.

Discuss all details as it generally relates to the plan. Discuss the following 4 Basic topics:

1. A general overview of the building's FDNY plan:

   Explain the building specific details the employee in this position is required to know once the plan is implemented.

1. Four non-fire emergency concepts (EAP concepts):

   Discuss the 4 methods of dealing with a non-fire emergency.

2. Duties for fire emergency:

   List the duties required for the position to be performed in the event of a fire emergency. You should be able to teach the trainee how to carry out their responsibility from the point the fire emergency situation start to the end of the emergency.

3. Duties for non-fire emergency:

   List the duties required for the position to be performed in the event of a non-fire emergency. You should be able to teach the trainee how to carry out their responsibility from the point the emergency situation start to the end of the emergency.

The candidate is allowed 10 minutes to write an outline of what the candidate want to cover but the candidate cannot read from preexisting training material.

The outline that the candidate prepares in this test segment can be referenced during the On-Site exam; however, if the candidate writes something down but forgets to verbally mention it, the candidate will NOT be given credit for it. The outline will be confiscated (It is to be handed in) at the end of the exam. (only inspector's paper)

All the required training information can be referred to Section 3.8 of this booklet.

20.4 Demonstration portion-Fire Command Center

All FLS Director candidates must be fully capable of operating the controls of and interpreting the signals of the Fire Command Center. Since each Fire Command Center is different, the candidate should obtain an instruction manual on its operation and/or training from the manufacturer, installation company, or other qualified persons prior the on-site exam.

During this demonstration portion, the candidate must instruct building employees who are posted at or near the Fire Command Center to remain silent while he/she is answering questions or demonstrating the required skills. If any other person answers questions that the candidate is required to answer, instructs the candidate on how to perform the required skills or interferes with the On-Site exam in any manner, the candidate will NOT receive credit for those questions.

The candidate will be required to demonstrate the following skills that should be performed upon implementation of the FDNY Plan:

- Staff identification don apparel (Puts on clothing or outerwear identifying his/her official role)

  Upon the demonstration session of the On-Site Exam, the candidate shall identify him/herself as an FLS Director to the inspector and others by donning a vest, armband, hat or other form of identification indicating his/her role. The candidate WILL NOT BE REMINDED or TOLD by the inspector to don his/her staff identification apparel.

- Identify all components of the Fire Alarm Panel

  The candidate will be asked to identify and explain all components of the Fire Alarm Panel.

- Operate the key functions of the fire alarm panel

  The candidate will be asked to demonstrate some key functions of the fire alarm panels including but not limited to:

  - Place the system off-line and on-line.
  - Acknowledging the signal at the fire alarm panel
  - Silence the fire tones
  - Manual activation of alert tone or alarm tone.

- Simulate fail-safe door release.
- Show the ability of controlling fans at the Fire Command Center, if applicable.
- Reset the Fire Command Center

- Performs all appropriate announcements

  Candidates will be required to demonstrate proficiency in the following areas:

  - Make all call announcement throughout the building, including the stairways and elevators.
  - Make localized announcement.

- Performs all appropriate communications

  Candidates will be required to communicate with FLS Wardens or the FLS Brigade via floor phones or other two-way voice communication.

  If the building has Comprehensive Fire Safety and Emergency Action Plan, the candidate also needs to demonstrate both the primary and alternate way (as indicated in the Plan) to communicate to:

  - EAP staff.
  - Building occupants.
  - Building critical operation staff.

The following actions are building related **MANDATORY** and must be performed correctly during the examination. Inability to perform any of these actions will result in a failure:

- Placing the fire alarm system on and off line.
- Making a P.A. announcement throughout the building, in the stairway(s) and elevators, and on individual floors.
- Acknowledging the signal at the fire alarm panel
- Communicating with Fire Wardens or the Fire Brigade via floor phones or other two-way voice communication.
- Manually activate the fire alarm tone on the floor(s) (if applicable)
- Silencing the fire tones throughout the building.
- Resetting the Fire Command Center.

20.5 Demonstration portion-elevator procedures

All FLS Director candidates must be fully capable of performing the elevator emergency operations.

During this demonstration portion, the candidate must instruct building employees who are posted at or near the Fire Command Center or elevator to remain silent while he/she is answering questions or demonstrating the required skills. If any other person answers questions that the candidate is required to answer, instructs the candidate on how to perform the required skills or interferes with the exam in any manner, the candidate will NOT receive credit for those questions.

During this section of the on-site exam, the candidate will be required to

- **perform the phase I emergency elevator recall,**
- **perform the phase II emergency in-car operation including the following:**
  - closing the elevator door,
  - canceling the floor selection, and
  - opening the door utilizing the built-in safety feature.
- **perform the independent/manual mode operation:**
  - explaining what actions are required prior taking a designated elevator bank in its independent mode.
  - manually operate a designated elevator car in the Independent Mode by closing the elevator door and moving the elevator to the designated floor
- **establish two-way communications between FCC and elevator car:**
  - acknowledging the call from the occupants in the elevator,
  - initiating communication with occupants inside the elevator.

The following actions are building related **MANDATORY** and must be performed correctly during the examination. Inability to perform any of these actions will result in a failure:

- perform the phase I emergency elevator recall
- perform the phase II emergency in-car operation
- perform the independent/manual mode operation

21. FIRE COMPONENT

21.1 Fire scenario

To prepare the proper responses during this section, the candidate should be familiar with Chapter 11 of this booklet. Some scenarios may also need knowledge from chapters 5, 6, and 7 of this booklet.

During this section, every candidate will be presented with a specific fire scenario indicating there is fire-related emergency. The candidate will be assigned as the only FLS Director on duty.

The inspector will read each part of the scenario and then wait for the candidate's responses before proceeding to the subsequent parts of the scenario. The candidate is allowed to take notes while the inspector is reading the scenario. Inspectors will provide paper for the candidate to take notes. The candidate will be directed by the inspector as to which sections are allowed for notes taking. The candidate will be given 15 minutes to prepare his/her responses on the paper that the inspector provides.

The candidate should print all the required responses on this sheet. Be sure to print complete answers in english. you should also verbally state your answers. No study materials or personal/outside notes are allowed at any time during the On-Site exam. After writing all required responses on the paper, the candidate **must verbally state his/her answers in order to receive credit** after the preparation time. The inspector will repeat the scenario **one time** at the candidate's request.

When stating answers, **the candidate should assume to be the only Fire and Life Safety Director on duty and responsible for the building. The candidate should state all the actions that are required to be taken**. The candidate must be as specific as possible and must not assume that actions were taken by others. **Candidates should explain all their actions in detail from the beginning of the incident/emergency to the very end**. The inspector may ask the candidate to restate and/or explain the given answers. The candidate must inform the inspector when he/she is satisfied with the answers provided and is finished stating all of the complete answers. **The candidate must return the sheets to the inspector when the scenario is completed. Before the candidate returns the sheets, the candidate must ensure the verbal statements match to the written responses on the sheets.**

21.2 Building scenario

To prepare the proper responses during this section, the candidate should be familiar with Chapter 5, 6, and 7 of this booklet.

During this section, every candidate will be presented with a specific building scenario indicating there is an out-of-service condition. The candidate will be assigned as an impairment coordinator and the only FLS Director on duty. The inspector will read each part of the scenario and then wait for the candidate's responses before proceeding to the subsequent parts of the scenario. The candidate is allowed to take notes while the inspector is reading the scenario. Inspectors will provide paper for the candidate to take notes. The candidate will be directed by the inspector as to which sections are allowed for notes taking. The candidate will be given 15 minutes to prepare his/her responses on the paper that the inspector provides. The candidate should print all the required responses on this sheet. Be sure to print complete answers in english. you should also verbally state your answers. No study materials or personal/outside notes are allowed at any time during the On-Site exam. After writing all required responses on the paper, the candidate **must verbally state his/her answers in order to receive credit** after the preparation time. The inspector will repeat the scenario **one time** at the candidate's request.

When stating answers, **the candidate should assume to be the only impairment coordinator on duty and responsible for the building.** When stating answers, **the candidate should state all the actions that are required to be taken**. The candidate must be as specific as possible and must not assume that actions were taken by others. **Candidates should explain all their actions in detail from the beginning of the incident/emergency to the very end**. The inspector may ask the candidate to restate and/or explain the given

answers. The candidate must inform the inspector when he/she is satisfied with the answers provided and is finished stating all of the complete answers. **The candidate must return the sheets to the inspector when the scenario is completed. Before the candidate returns the sheets, the candidate must ensure the verbal statements match to the written responses on the sheets.**

An impairment coordinator is responsible for ensuring that proper safety precautions are taken when a fire protection system is out of service. In the event of a major building impairment, you must know the procedures available for safeguarding the building occupants. This is an important concept that could result in failure if not stated.

Fire protection systems include, but are not limited to, the Fire Command Center and it's components, standpipe systems and sprinkler systems.

If there is any planned removal from service of a required fire protection system, the impairment coordinator must authorize and personally supervise the placing of the fire protection system out of service. Before authorizing the placing of the fire protection out of service, the impairment coordinator must ensure the correct authorized Certificate of Fitness holder will be responsible for the maintenance, repair or test of the system (refer to Section 5.2.13; Section 5.3.6; Section 5.4.6 of this booklet). The impairment coordinator also must perform some required duties listed in Section 5.5 of this book.

During the impairment period, the fire watch must be provided for an occupied building. If the system will be out of service for more than 4 hours, the certified fire guard must be provided. The detail is indicated in Section 5.5.1 and 5.5.2 of this booklet.

Once an out of service condition has been corrected and the system is being restored to normal operation, the impairment coordinator must perform the required duties indicated in Section 5.5.7 of this booklet.

22. NON-FIRE COMPONENT

22.1 Building portion-building knowledge related to Comprehensive Plan

The candidates scheduled for an occupancy **without** a Comprehensive Fire Safety and Emergency Action Plan **will NOT** be tested for this non-fire component.

Candidates will be required to answer site specific questions regarding the following topics from the Comprehensive Fire Safety and Emergency Action Plan and BIC of the candidate's building including but not limited to :

(1) Regarding FLS staff members

The candidate should know the three FLS staff members (or their designees) listed on the Comprehensive Plan required to be on the Brigade (titles & name).

- Property Manager & name
- Director of Security & name
- Chief Engineer & name

The candidate should know the titles and names of staff members that will assess the following building components:

- Entrances/Exits & Stairway safety.
- Elevator safety.
- Utilities & Fuel Oil systems.
- HVAC.

(2) Regarding In-Building Relocation

The candidate should know as follows:

- The types of spaces used for In-Building Relocation (IBR).
- If there is an IBR area on each floor.
- If a floor does not have an IBR area, what staircase will be utilized to reach their IBR area?

(3) Primary/Alternate Routes and Assembly Areas

The candidate should know the primary/alternate evacuation routes.

The candidate should also know:

- The primary/alternate assembly areas.
- The methods used to account for the occupants, after movement. Also how and by whom it will be communicated back to the FLS Director.

(4) Location of hazardous material and any special notes listed on BIC

22.2 Building occupants training for active shooter incident

To prepare the proper responses during this section, the candidate should be familiar with Section 18.2 of this booklet.

During this section, the candidate will need to present active shooter training. During this exam segment, the candidate must assume that the inspector is a building occupant. The candidate must train the building occupants how to respond in case of an active shooter emergency. This building occupant does not have any knowledge of how to respond to the active shooter emergency. The candidates need to verbally train the building occupant and describe all required information specifically and clearly. The candidate should train the occupants in detail, so that, upon completion of the training, the occupants will clearly understand what to do in case of an active shooter emergency.

The candidate will be given 10 minutes to prepare his/her responses on the paper that the inspector provides. No study materials or personal/outside notes are allowed at any time during the On-Site exam. The candidate is

allowed to write the responses on the paper but the candidate **must verbally state his/her answers in order to receive credit** after the preparation time. Do not make any assumptions.

The candidate must discuss the following three basic topics in the training:

1. Survival techniques and fire alarm pull station

State the three survival techniques when an active shooter is in the occupants' vicinity. Define and discuss the three techniques. Explain the details, such as how to choose the proper technique, how to apply the techniques, and what should be considered when you apply a specific technique.

Explain the manual fire alarm system procedures to be followed during an active shooter incident.

2. Information for 911 operators

Discuss the information that should be provided to the 911 operators.

3. How to respond when law enforcement arrives on scene

Inform the occupants what to expect when law enforcement arrives on scene as they work to stop an active shooter and eliminate the threat.

When stating answers, **the candidate should state all the training knowledge that are required to be provided**. The candidate must be as specific as possible and must not assume that any training were taken by others. **Candidates should explain all their trainings in detail**. The inspector may ask the candidate to restate and/or explain the given answers. The candidate must inform the inspector when he/she is satisfied with the answers provided and is finished stating all of the complete answers. **The candidate must return the notes to the inspector when the scenario is completed.**

22.3 Non-fire emergency scenario

To prepare the proper responses during this section, the candidate should be familiar with Chapter 15 and 17 of this booklet.

During this section, every candidate will be presented with a specific scenario indicating there is a non-fire emergency scenario. **The candidate will be assigned as the only FLS Director on duty.**

The inspector will read each part of the scenario and then wait for the candidate's responses before proceeding to the subsequent parts of the scenario. The candidate is allowed to take notes while the inspector is reading the scenario. Inspectors will provide paper for the candidate to take notes. The candidate will be directed by the inspector as to which sections are allowed for notes taking. The candidate will be given 15 minutes to prepare his/her responses on the paper that the inspector provides.

The candidate should print all the required responses on this sheet. Be sure to print complete answers in english. you should also verbally state your answers. No study materials or personal/outside notes are allowed at any time during the On-Site exam. After writing all required responses on the paper, the candidate **must verbally state his/her answers in order to receive credit** after the preparation time. The inspector will repeat the scenario **one time** at the candidate's request.

When stating answers, **the candidate should state all the actions that are required to be taken**. The candidate must be as specific as possible and must not assume that actions were taken by others. **Candidates should explain all their actions in detail from the beginning of the incident/emergency to the very end**. Candidate should remember to cover the actions that the candidate will implement for the affected area and the rest of the building. The inspector may ask the candidate to restate and/or explain the given answers. The candidate must inform the inspector when he/she is satisfied with the answers provided and is finished stating all of the complete answers. **The candidate must return the notes to the inspector when the scenario is completed. Before the candidate returns the sheets, the candidate must ensure the verbal statements match to the written responses on the sheets.**

Class Exercise and Discussion for Active Shooter Cases

(additional material for school instructors)

Note: All FDNY accredited schools MUST provide this document to the students after the 4-hr active shooter and medical emergency preparedness course without additional charge.

Contents

Introduction

This document is to provide the FDNY approved schools the major discussion points for each question provided in every case study. The instructors are required to cover all discussion points for the case they selected. The FDNY strongly recommends that the instructors do not distribute this document until the end of the class. Students' active involvement in real case study can help them to apply all the knowledge they learned from the class to real-world problems.

The following recommendations are **general guidelines.** They are considered as best practice and may be useful in real life emergencies. The purpose is NOT 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.

Discussion points

Hotel case 1: Austin Omni hotel shooting

Assume you are a FLS Director of a hotel

1. *What information and knowledge should you share with the hotel staff during your periodic active shooter emergency preparedness training?*
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene
2. *Assume you are in a safe location. You are informed that a person is pacing around the lobby of the hotel with a rifle. What action should you take?*

   If safe to do so,
   - call 911
   - report to the fire command center, make notification to the building occupants
   - relocate any building occupants from the lobby area
   - assess the building components or systems
3. *You are in a safe location and are capable of making a notification to all the hotel occupants. What is the content of the notification you will make?*

   "Attention! Emergency! A person is carrying a gun in the lobby area. Avoid danger. Move to a safe area now. Stay in your room, lock the door and get down."
4. *You are in a safe location. If the shooter starts to fire shots before police arrive, what action should you take? What is the content of the notification you will make, if it is safe to do so?*

   If safe to do so,

- call 911
- report to the fire command center, make notification to the building occupants. Content of the notification to the building occupants: “Attention! Emergency! Gun shots are fired in the lobby area. Avoid danger. Move to a safe area now. Stay in your room, lock the door and get down.”
- assess the building components or systems

5. *If you are aware of anyone who holds a firearm carry license, what should you do?*
   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer’s instruction when the first responders arrive on scene.
6. *What information should you provide to the arriving police officers?*
   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:
     - A shooter fired his rifle and shot a bystander in the lobby area
     - Physical description of shooter(s)

       Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.
     - The special design of the building

Hotel case 2: 2005 Living Church of God shooting

Assume you are a FLS Director of a hotel.

1. *What information and knowledge should you share with the hotel staff during your periodic active shooter emergency preparedness training?*
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene

2. *Assume you are in a safe location while the shooting is occurring in a conference room on 2nd floor of your hotel. What action should you take?*

   If safe to do so,

   - call 911
   - report to the fire command center, make notification to the building occupants
   - assess the building components or systems

   If there is a freight elevator being operated manually in the building, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

3. *You are in a safe location and are capable of making a notification to all the hotel occupants. What is the content of the notification you will make?*

   "Attention! Emergency! Gun shots are fired in a conference room on 2nd floor. Avoid danger. Move to a safe area now. Stay in your room, lock the door and get down."

4. *If you are aware of anyone who holds a firearm carry license, what should you do?*

   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.

5. *What information should you provide to the arriving police officers?*

   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:
     - Gun shots are fired in a conference room on 2nd floor
     - Witness reported that one active shooter using a handgun was shooting at the attendees in the conference room
     - Physical description of shooter(s)
       Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.
     - Several people were shot
     - The special design of the building

Hotel case 3: 2010 Muna hotel attack

Assume you are a FLS Director of a hotel.

1. *What information and knowledge should you share with the hotel staff during your periodic active shooter emergency preparedness training?*
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene
2. *Assume you are in a safe location while the attack began in your hotel. Your staff indicated that there is a group of shooters firing automatic weapons on the ground floor of the hotel. What action should you take?*

   If safe to do so,
   - call 911
   - report to the fire command center, make notification to the building occupants
   - assess the building components or systems

   If there is a freight elevator being operated manually in the building, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.
3. *You are in a safe location and are capable of making a notification to all the hotel occupants. What is the content of the notification you will make?*

   Note: Circumstances that should be covered:
   - *Multiple shooters*
   - *Physical description of the shooters (e.g. clothing, weapons, etc.)*
   - *Shooters are trying to open hotel room doors*

   "Attention! Emergency! Gun shots are fired on the first floor. Many shooters wear government military uniforms and they are moving to different floors. Avoid danger. Move to a safe area now. Stay in your room, lock the door and get down."
4. *If you are aware of anyone who holds a firearm carry license, what should you do?*
   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.
5. *What information should you provide to the arriving police officers?*

- Notify them of the nature of the emergency and the actions taken up to the current time
- Provide building information including:
  - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
  - Fire Safety and Emergency Action Plan
  - Premises security radios/walkie-talkies
- Provide the information of the active shooter incident:
  - A group of shooters in the hotel, they are moving throughout different floors
  - The shooters are wearing military uniforms
  - The type of weapon the shooters are using
  - Several people were shot throughout different floors
  - There are many lawmakers in this hotel
  - The special design of the building

Public assembly case 1: 2012 Colorado movie theater shooting

Assume you are a FLS Director of a multiplex theater.

1. *What information and knowledge should you share with the theater staff during your periodic active shooter emergency preparedness training?*
   - If you see something, say something to the responsible personnel. Staff should report suspicious activity. Emergency doors should remain closed but not chained shut.
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene
2. *During theater hours, an employee informs you that an emergency exit of a theater is propped open. What action should you take?*

   Instruct a staff member to investigate and correct the situation. The staff should also report any suspicious activity to the FLS Director.
3. *Before you make any correction for the emergency exit door, the fire alarm begins* to sound*, smoke is coming out from a theater and gunshots are heard from the same theater. The crowd starts panicking and self-evacuating. You are in a safe location. What action should you take?*

   If safe to do so,
   - call 911
   - report to the fire command center, make notification to the building occupants

- turn on the lights in the theater(s)
- request the FLS Brigade to help evacuate the occupants
- assess the building components or systems

If there is a freight elevator being operated manually in the building, advise the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

4. *You are in a safe location and are capable of making a notification to all the theater occupants. What is the content of the notification you will make?*

   "Attention! Emergency! Gun shots are fired in theater 9 on the ground floor. There might be a fire inside the theater 9. Avoid danger. Move to a safe area or barricade if possible."

5. *If you are aware of anyone who holds a firearm carry license, what should you do?*
   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.

6. *What information should you provide to the arriving police officers?*
   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:
     - Gun shots were fired in the theater 9, fire alarm is activated, smoke coming from theater 9
     - The shooter is wearing tactical clothing
     - The type of weapon the shooter is using
     - The special design of the building

Public assembly case 2: 2016 Irving Plaza shooting

Assume you are a FLS Director of this concert venue.

1. *What information and knowledge should you share with the venue staff during your periodic active shooter emergency preparedness training?*
   - The security procedure should be followed

- ABC tactics
- If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident.
- Information to be reported to 911 operators
- How to respond when police officers arrive on the scene

2. *Assume you are in a safe location while gun shots were heard. The crowd starts panicking and self-evacuating. What actions should you take?*

   If safe to do so,

   - call 911
   - report to the fire command center, make notification to the building occupants
   - turn on all lights in the venue
   - request the FLS Brigade to help evacuate the occupants
   - assess the building components or systems

   If there is a freight elevator being operated manually in the building, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

3. *You are in a safe location and are capable of making a notification to all the venue occupants. What is the content of the notification you will make?*

"Attention! Emergency! Gun shots fired in the venue. People got hurt near the stage. Avoid danger. Move to a safe area or barricade if possible."

4. *If you are aware of anyone who holds a firearm carry license, what should you do?*

   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.

5. What information should you provide to the arriving police officers?

   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:

- Gun shots were fired in this venue, people got hurt by the stage and in a VIP room
- Shooter is unknown
- Many popular performers in the venue
- The special design of the building

Public assembly case 3: 2013 Westgate Shopping Mall shooting

Assume you are a FLS Director of a large mall.

1. *What information and knowledge should you share with the mall staff during your periodic active shooter emergency preparedness training?*
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene
2. *Assume you are in a safe location while the attack began in the mall. Your staff indicated that there were two groups of shooters firing automatic weapons on the ground floor and the rooftop. What actions should you take?*

   If safe to do so,
   - call 911
   - report to the fire command center, make notification to the building occupants
   - request the FLS Brigade to help evacuate the occupants
   - assess the building components or systems

   If there is a freight elevator being operated manually, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.
3. *You are in a safe location and are capable of making a notification to all the occupants. What is the content of the notification you will make?*

   "Attention! Emergency! Gun shots are fired on the first floor and on the roof. There are multiple shooters and they are moving to different floors. Avoid danger. Move to a safe area or barricade if possible."
4. *If you are aware of anyone who holds a firearm carry license, what should you do?*
   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.
5. *What information should you provide to the arriving police officers?*

- Notify them of the nature of the emergency and the actions taken up to the current time
- Provide building information including:
  - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
  - Fire Safety and Emergency Action Plan
  - Premises security radios/walkie-talkies
- Provide the information of the active shooter incident:
  - Gun shots were fired in different floors, many people got hurt or killed
  - There are multiple shooters
  - The type of weapons used, if known
  - Several civilians and plainclothes officers are engaging with the shooters and helping the occupants to evacuate
  - The special design of the building

University case 1: 2007 Virginia Tech shooting

Assume you are a FLS Director of a university containing multi-buildings on campus.

1. *What information and knowledge should you share with the university students, professors and staff during your periodic active shooter emergency preparedness training?*

   - If you see something, say something to the responsible personnel. Staff, students, professors should report suspicious activity. Main entrance doors should never be chained shut. 911 must be called for any bomb threat.
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene

2. Assume you are in a safe location while the first attack began and the attack was in Dormitory ABC. You are informed that there was a shooting in a dormitory and two dead bodies were found. No one is sure who and where the shooter(s) is/are. What actions should you take? What is the content of the notification you will make?

   If safe to do so,

   - call 911
   - report to the fire command center, make notification to the building and campus occupants. Content of the notification: "Attention! Emergency! A shooting incident occurred in Dormitory ABC with multiple victims. The shooter may be

loose. Avoid danger. Move to a safe area now or barricade if possible. Persons off campus should stay away from campus."

- assess the building and campus components or systems

If there is a freight elevator being operated manually in the dormitory, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

3. *You are informed that there is a bomb threat in Building X. What actions should you take?*

- Call 911 to report the bomb threat
- The FLS Director should immediately report to the Fire Command Center
- Notify/consult with the FLS Brigade regarding the implementation of the emergency plan
- If the plan is activated, the FLS Director has to make notification to the building and campus occupants
- Assess the building components or systems

4. *Assume you are in a safe location while the second shooting began on the 2nd floor of Building K. What actions should you take? What is the content of the notification you will make?*

If safe to do so,

- call 911
- report to the fire command center; make notification to the building and campus occupants. Content of the notification:

  "Attention! Emergency! An active shooter was last seen on 2nd floor of building K. Avoid danger. Move to a safe area or barricade if possible. Persons off campus should stay away from campus"

- assess the building and campus components or systems

If there is a freight elevator being operated manually in the dormitory, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

5. *If you are aware of anyone who holds a firearm carry license, what should you do?*

- Notify 911 and the first responders that there is someone on campus who has a firearm carry license.
- A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.

6. *What information should you provide to the arriving police officers?*

- Notify them of the nature of the emergency and the actions taken up to the current time

- Provide building information including:
  - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
  - Fire Safety and Emergency Action Plan
  - Premises security radios/walkie-talkies
- Provide the information of the active shooter incident:
  - Gun shots were fired mainly on 2nd floor of Building K, many people got hurt or killed
  - The shooter is a student, named John Doe and he has multiple weapons
  - Types of weapon if known
  - Physical description of the shooter

    Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.
  - Bomb threat note was found on the chained doors
  - The special design of the building

University case 2: 2008 Northern Illinois University shooting

Assume you are a FLS Director of a university containing multi-buildings on campus.

1. *What information and knowledge should you share with the university students, professors and staff during your periodic active shooter emergency preparedness training?*
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene
2. *Assume you are in a safe location while the attack began. You are informed that there was a shooting in a lecture hall. What action should you take?*

   If safe to do so,
   - call 911
   - report to the fire command center, make notification to the building and campus occupants
   - assess the building and campus components or systems

   If there is a freight elevator being operated manually, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.
3. *Assume the attack happened in a Lecture Hall Y. You are in a safe location and are capable of making a notification to all the campus occupants. What is the content of the notification you will make?*

"Attention! Emergency! An active shooter was last seen in lecture hall Y. Avoid danger. Move to a safe area or barricade if possible. Persons off campus should stay away from campus"

4. *If you are aware of anyone who holds a firearm carry license, what should you do?*
   - Notify 911 and the first responders that there is someone on campus who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.
5. *What information should you provide to the arriving police officers?*
   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:
     - Gun shots were fired in a university lecture hall, many people got hurt or killed
     - The shooter is a former student, named John Doe, and he is using multiple weapons
     - Physical description of the shooter

       Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.
     - The special design of the building

University case 3: 2012 Oikos University shooting

Assume you are a FLS Director of a single-building university.

1. *What information and knowledge should you share with the university students, professors and staff during your periodic active shooter emergency preparedness training?*
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene
2. *Assume you are in a safe location while the attack began. You are informed that there was shooting in a classroom A. What action should you take?*

If safe to do so,

- call 911
- report to the fire command center, make notification to the campus occupants
- assess the building and campus components or systems

If there is a freight elevator being operated manually in the building, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

3. *You are in a safe location and are capable of making a notification to all the building occupants. What is the content of the notification you will make?*

   "Attention! Emergency! An active shooter was last seen in classroom A. Avoid danger. Move to a safe area or barricade if possible. Persons off campus should stay away from campus"

4. *If you are aware of anyone who holds a firearm carry license, what should you do?*

   - Notify 911 and the first responders that there is someone on campus who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.

5. *What information should you provide to the arriving police officers?*

   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:
     - Gun shots were fired in classroom A, many people got hurt or killed
     - The shooter is a former student, named John Doe
     - The type of weapons he is using
     - Physical description of the shooter

       Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.
     - The special design of the building

Office buildings case 1: 2008 Silicon Valley office shooting

Assume you are a FLS Director of an office building.

1. *What information and knowledge should you share with the building occupants during your periodic active shooter emergency preparedness training?*

   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene

2. *Assume you are in a safe location while the attack began. You are informed that there was shooting in a meeting room. What action should you take?*

   If safe to do so,

   - call 911
   - report to the fire command center, make notification to the building occupants
   - assess the building and campus components or systems

   If there is a freight elevator being operated manually in the building, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

3. *Assume the suite is room 401 on 4th floor in your building. You are in a safe location and are capable of making a notification to all the building occupants. What is the content of the notification you will make?*

   "Attention! Emergency! An active shooter was last seen in room 401 located on the 4th floor. Avoid danger. Implement the Avoid-Barricade-Confront strategy based on your location."

4. *If you are aware of anyone who holds a firearm carry license, what should you do?*

   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.

5. *What information should you provide to the arriving police officers?*

   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:

- Gun shots were fired in suite 401 on 4th floor, many people got hurt or killed
- The shooter is a former employee, named John Doe and he used a handgun
- He may be driving silver SUV
- Physical description of the shooter

  Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.
- The special design of the building

<u>Office buildings case 2: 1999 Atlanta office shooting</u>

1. *Assume you are a FLS Director of an office building. What information and knowledge should you share with the building occupants during your periodic active shooter emergency preparedness training?*

   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident
   - Information to be reported to 911 operators
   - How to respond when police officers arrive on the scene
2. *Assume you are a FLS Director of the first office building and you are informed that there is a shooting on third floor. What action should you take?*

   If safe to do so,

   - call 911
   - report to the fire command center, make notification to the building occupants
   - assess the building and campus components or systems

   If there is a freight elevator being operated manually in the building, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.
3. *Assume you are a FLS Director of the first office building; you are in a safe location and are capable of making a notification to all the office occupants. What is the content of the notification you will make?*

   "Attention! Emergency! An active shooter was last seen on 3rd floor. Avoid danger. Implement the Avoid-Barricade-Confront strategy based on your location.
4. *Assume you are a FLS Director of the first office building, what information should you provide to the arriving police officers?*

   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)

- Fire Safety and Emergency Action Plan
- Premises security radios/walkie-talkies

- Provide the information of the active shooter incident:
  - Gun shots were fired on 3rd floor in Momentum Securities, many people got hurt or killed
  - The shooter is a former employee, named John Doe and he used two pistols.
  - Physical description of the shooter

    Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.
  - The special design of the building

5. *If you are aware of anyone who holds a firearm carry license, what should you do?*
   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.
6. *Assume you are a FLS Director of another office building and you are informed that there is a shooting in a nearby Building B. What action should you take? What is the content of the notification you will make?*
   - The FLS Director should immediately report to the Fire Command Center
   - Ensure all the entrances are secured
   - Ensure 911 is notified
   - Making notification to the building occupants. Content of the notification: "Attention! There have been multiple shootings in Building B. The shooter has not been caught. The in-building relocation is implemented to ensure everyone will not be affected by the outside active shooter incident. Stay away from all windows. All entrances to our building are secured."
   - Consult with the FLS Brigade
   - Assess the building components or systems

Office buildings case 3: 2010 Las Vegas courthouse shooting

Assume you are a FLS Director of an office building.

1. *What information and knowledge should you share with the building occupants during your periodic active shooter emergency preparedness training?*
   - ABC tactics
   - If safe to do so, call 911 and then contact the FLS Director to inform of any active shooter incident

- Information to be reported to 911 operators
- How to respond when police officers arrive on the scene

2. *Assume you are in a safe location while the shooting begins in the lobby and the fire command center is not compromised. What action should you take?*

   If safe to do so,

   - call 911
   - report to the fire command center, make notification to the building occupants
   - assess the building components or systems

   If there is a freight elevator being operated manually in the building, advice the operator to return the freight elevator to the ground level with the door closed, if safe to do so.

3. *You are in a safe location and are capable of making a notification to all the building occupants. What is the content of the notification you will make?*

   "Attention! Emergency! An active shooter was last seen in the lobby of this building. Avoid danger. Implement the Avoid-Barricade-Confront strategy based on your location."

4. *If you are aware of anyone who holds a firearm carry license, what should you do?*

   - Notify 911 and the first responders that there is someone in the building who has a firearm carry license.
   - A person who possesses a firearm carry license should be trained to identify him/herself to the first responders during the event and should be instructed to comply with police officer's instruction when the first responders arrive on scene.

5. *What information should you provide to the arriving police officers?*

   - Notify them of the nature of the emergency and the actions taken up to the current time
   - Provide building information including:
     - 3 sets of floor plans, Building Information Card (BIC), and keys/access cards (2 sets for NYPD and 1 set for FDNY)
     - Fire Safety and Emergency Action Plan
     - Premises security radios/walkie-talkies
   - Provide the information of the active shooter incident:
     - Gun shots were fired in the lobby, people got hurt or killed
     - The shooter used a shotgun. He has fled after the shooting.
     - Physical description

       Example: male/female, race, hair color, clothing, facial hair (mustache, beard or sideburns), identifying marks (tattoos, scars), etc.

     - The special design of the building

- Many senators or judges are in this building

6. *Assume you are a FLS Director of another commercial building surrounding the courthouse. You hear the local news stating that the shooter may be on the loose. What action should you take? What is the content of the notification you will make?*

- The FLS Director should immediately report to the Fire Command Center
- Notify/consult with the FLS Brigade regarding the implementation of the emergency plan
- Call 911 to inform that the emergency plan has been implemented.
- Secure all the entrances
- If the plan is activated, the FLS Director has to make notification to the building occupants
- Assess the building components or systems
- Content of the notification: "Attention! Emergency! There has been a shooting in the courthouse nearby. The shooter may not be caught. The in-building relocation is implemented to ensure everyone will not be affected by the outside active shooter incident. Stay away from all windows. All entrances to our building are secured."

Case 1: 2011 Tucson shooting (supermarket parking lot)

1. *What part of ABC tactics does this case emphasize?*

   Confront. The civilians disrupted and incapacitated the shooter. They acted aggressively as a group. They used the items (e.g. chairs) in the environment to stop further injuries.

Case 2: 2016 UCLA shooting

2. *What part of ABC tactics does this case emphasize?*

   Barricade. The students used different tools (e.g. belt, printer, chair, desks, etc.) to stop doors from opening when they found some doors are not lockable.