CHAPTER 13-78 / HIGH RISE BUILDINGS - EMERGENCY PROCEDURE

OVERVIEW

- A high rise building can be defined as any new or existing structure over 80ft above grade which is also of occupancy classification: *A* (Residential), *C*(Assembly), *D*(Open Air Assembly), *E* (Business), *F*(Mercantile), or *G*(Industrial).
- A *Category 1* high rise building is over 780ft above grade.
- A *Category 2* high rise building is over 540ft above grade
- A *Category 3* high rise building is over 275ft above grade.
- A *Category 4* high rise building is over 80 ft. above grade (up to and including 275ft.)
- The owner of any *Category 1 and Category 2* building and the owner of each *Category 3 and Category 4* building which is of assembly or open air assembly classification must file a copy of the building's procedure plan with the City's *Office of Emergency Communications*.
- Once a plan has been filed, a copy of an updated or amended plan must be filed with the City's *Office of Emergency Communications* when the existing plan is updated or amended.
- In *Category 1* high rise buildings, each plan shall require safety drills to be carried out twice a year under the direction of the Fire Safety Director (F.S.D.)
- Safety drills in non-residential high rise buildings will include <u>all</u> employees, tenants and other occupants.
- Safety drills may occur on a floor-by-floor basis, and a drill may conclude when all participating occupants have fully entered and have begun using the designated stairwells.
- In *Category 3 and Category 4* high rise buildings that are residential or business usage, safety drills are encouraged but not required.
- In *Category 2* high rise buildings that are classified as residential or business, safety drills shall be carried out at least once a year.
- Any violation of any provision of this chapter shall subject the owner, tenant or other responsible party to a penalty of between $500.00 and $1,000.00 for each separate and distinct offense.

- Identification lettering for stairwells and rescue assistance areas shall be permanent and a minimum of six(6) inches in height.

- Alphabetical and directional letter identification for the stairwell and the floor number to which the door opens is to be provided within every interior stairwell enclosure at every floor adjacent to the stairwell door.

- Identification lettering for stairwells and rescue assistance areas shall comply with the *Americans With Disabilities Act* accessibility guidelines.

- In a *Category 4* high rise building, other than *C*(Assembly) or *D*(Open Air Assembly), a certified F.S.D. and one or more certified deputy F.S.D.s are encouraged but not required.

- Each plan for *Category 1* buildings shall include a Certified Fire Safety Director.

- Each plan for *Category 2* buildings shall include the same designated personnel as required for *Category 1* buildings, with the exception of Fire Wardens, who are encouraged but not mandatory.

- In a residential building, the building evacuation supervisor may be a resident of that building.

- In a residential building, the emergency evacuation team may include residents of that building.

The Municipal Code of Chicago High Rise Building Emergency Procedure requires the building Fire Safety Director to conduct monthly building safety inspections. All hazards and safety concerns shall be reported to the building management for immediate correction.

SAFETY INSPECTION

A thorough building safety inspection shall start at the roof and progress down through the building, floor by floor. Careful attention must be given to stairwells and fire escapes. Some older buildings have open stairwells, and in a fire situation, the fire escape may provide the safest means of egress.

Roof Inspection

Starting on the roof, check for rubbish which may have been left by roofers, tuckpointers or other workers. All rubbish must be removed from the area. Inspect the stairs or ladders leading to the roof from the fire escape. They should be tightly secured onto the building with no signs of decay or rust build-up visible on the steel structure.

While inspecting the elevator penthouse, check for rubbish and oily rags. Many fires can start from the arcing of elevator switches and over-heated motors igniting rubbish fueled by oily rags. The fire code requires that rags be placed in metal, self-closing cans. Storage is not allowed in this area. Check to make sure that the portable fire extinguishers are fully charged, tagged and properly serviced annually by a licensed fire extinguisher service person.

Stairwell Inspection

As you descend down the building stairwell, make sure that it is properly illuminated , that there are no obstructions such as storage or rubbish blocking the exit-way, and that there is no storage under the stairs. All stairwell doors should be in good repair; they should be self-closing and latch properly. In a fire situation, if the doors do not close properly, smoke can fill the stairwell, making it unuseable during an evacuation.

Stairwell identification is to be in place as required by Sections (13-76-075) and (13-196-085) of the Municipal Code of Chicago. Areas of rescue assistance also should be identified as required by code.

Standpipe System Inspection

The standpipe system runs the total height of the stairwell. Standpipe outlets can also be found in different locations throughout the building, where required, and must remain accessible at all times. These systems have 2½ inch threaded port outlets on each floor which firefighters use to connect the fire hoses to extinguish fires on the upper floors of high rise buildings. Make sure that these ports are equipped with 2½ inch caps and chains, which are required to protect the threads from damage. For standpipe systems that have a hose line attached, inspect the fabric of the hose for decay or dry rot and make sure that the hose nozzle is securely in place. Hoses must be secured inside a cabinet or cover.

Corridor Inspection

As you inspect the corridors, make sure that all exit signs are illuminated. Check to make sure that signs showing the building's core floor plan, corridors, stairways, evacuation routes, areas of rescue assistance and elevator lobbies are posted clearly.

To prevent the travel of smoke from floor to floor make sure that the openings around piping, heating ducts, communications cables, etc., are sealed with an approved non-combustible material. No storage is allowed in utility, communication and electrical closets.

Check to make sure that fire escape doors and windows are accessible and that there is no obstruction in front of them. All windows and doors should open easily. Where required, steps should be placed below fire escape windows for easy access. Nothing is to be placed on the landings or steps of the exterior fire escape.

In storage rooms, stock should not be stacked higher than 18 inches below the ceiling or sprinkler heads. Storage cannot obstruct sprinkler control valves. Please note that nothing is allowed to be hung from the piping system. Also, make sure there is sufficient aisle space.

Lobby Inspection

In the lobby, all exterior exit doors must open easily and without a key. The panic bars should be easy to press when opening exit doors. Make sure that nothing is blocking the exits. Check all elevators for proper markings and identification.

Exterior Inspection

No inspection is complete without checking the exterior of the building. Inspect the Siamese (fire department) connections. These are the twin ports outside the building to which the fire department connects the hoses to supply water to the building's sprinkler and standpipe system. Caps are to be in place on these ports. The swivel should be oiled and free of rust. There should be no parking or placement of dumpsters under fire escapes or in front of exit doors. Make sure that the fire escape counter balance can be lowered and properly grounded.

Inspect the dock area for any obvious safety hazards such as poor housekeeping, missing fire extinguishers, damaged sprinkler heads or piping, improper propane tank storage, or the propping open of fire doors.

Below Grade Inspection

In the basement or any below-grade areas make sure that nothing is stored under the stairs. Check for the accumulation of rubbish in these areas and also in the elevator pits. Remove any rubbish that is found.

Fire code prohibits the below-grade storage of any flammable liquid. Compressed gas cylinders are to be stored in an isolated location and stored on racks or chained to the walls.

Make sure that there are no holes or openings in the walls in the boiler room. The boiler room door must be self-closing and in good operating condition. No combustible storage is allowed in boiler rooms.

Basement storage areas over 2,500 sq. ft., that are used for combustible storage, are required to be protected with an automatic sprinkler system and enclosed in a two(2) hour fire-resistive room with a self-closing, 1½ hour rated fire door. Storage in these rooms shall not be placed higher than 18 inches below the sprinkler heads. Make sure that there is sufficient aisle space in storage rooms.

In the fire pump room, make sure that the area is well illuminated, clean and that nothing is stored there. All sprinkler control valves shall be chained in the open position.

This inspection procedure should be applied to all tenants of the building.

******NOTE******

High rise fire alarm systems do not sound a general alarm that would alert the entire building to the need to evacuate. In the event that a total evacuation is required, an “all call” can be made from the fire command panel instructing the occupants to evacuate.

It should also be noted that buildings built before 1975 do not have to meet the high rise code requirements unless they have undergone a rehabilitation exceeding 50% of the reproduction cost of the building. In many cases such buildings, are only required to have a fire pump and a standpipe system.

FIRE DETECTION & SUPPRESSION SYSTEMS
And Other Life Safety Requirements for High Rise Buildings

- Fire Alarms
- Automatic Sprinkler, Standpipe and Fire Pump
- Smoke-proof Tower
- Elevator Recall

I. FIRE DETECTION SYSTEMS

A. HIGH RISE FIRE ALARM SYSTEM

A high rise fire alarm system contains a series of panels and components which make up the fire command life safety system. The entire system is supervised and monitored by an Underwriters Laboratory (UL)- listed central station monitoring service that notifies the fire department when a water flow is indicated in the sprinkler system or when the heat or smoke detectors are activated.

B. SMOKE DETECTORS

Are required in:

1. Fan and electrical rooms
2. Return air ducts and plenums
3. Elevator lobbies
4. Corridors on each floor
5. In residential dwelling units within 15 feet of the entrance to all sleeping rooms

C. HEAT DETECTORS

Are required in:

1. Storage rooms
2. Boiler rooms
3. Furnace rooms

D. VOICE COMMUNICATION SYSTEM

A two-way voice communication system is required for firefighters' use to communicate with the incident commander in the event of a fire or emergency. Firefighter phones are installed on every fifth floor throughout the building's stairwells.

A speaker is required between the fire command panel and the following locations:

1. Elevators and elevator lobbies
2. All required stairwells, one(1) speaker on every fifth floor
3. Office areas exceeding five hundred(500) square feet
4. In corridors, at intervals of at least 75 feet and at the exit stair doors.

F. STAIRWELL DOOR UNLOCKING DEVICE

All stairwell doors which are locked from the stairwell side are electrically controlled and automatically unlocked from a switch at the fire command panel. The signal is activated by a switching device at the panel.

G. MECHANICAL VENTILATION

Where required, the building's mechanical ventilation system is controlled by the life safety system and also by the activation of the smoke detectors installed within the building's duct work and air plenums. This will shut down the ventilation system to prevent the spread of smoke.

II. FIRE SUPPRESSION SYSTEMS

A. AUTOMATIC SPRINKLER SYSTEM

An automatic sprinkler system is a system of water pipes, discharge nozzles and control valves designed to activate during a fire to automatically discharge enough water to control or extinguish a fire.

Sprinkler systems have an extremely high degree of reliability, but despite this high degree of reliability, sprinklers can fail to control or extinguish a fire because of the following factors:

- closed valves
- frozen water supplies
- inadequate water supply
- obstructed sprinkler discharge
- damaged sprinkler heads

In order for a sprinkler system to function properly, it must be designed, installed and maintained properly.

Water is supplied to the sprinkler system by the suppression system's fire pump and is augmented by the Siamese (fire department) connection at street level.

Typically, for normal applications, wet and dry sprinkler systems are installed.

Wet pipe system: Automatic sprinkler system in which the pipes are constantly filled with water under pressure. *See illustration II-A (1) in Reference Guide.* This type of system is installed in heated buildings and where freezing temperatures are not an issue.

Dry pipe system: Fire protection sprinkler system that has air in its piping instead of water under pressure. Dry systems are installed in areas subject to freezing. *See illustration II-A (2) in Reference Guide.*

B. STANDPIPE SYSTEM

Standpipe systems are fixed piping systems with equipment that provide a means to transport water to designated areas of a building where hoses can be deployed for fire fighting.

As with the sprinkler system, water is supplied to the standpipe system by the suppressions system's fire pump and is augmented by the Siamese (fire department) connection at street level. This connection is made by fire department pumpers.

The standpipe system runs the total height of the stairwell. Standpipe outlets can also be found in different locations throughout the building, where required. These systems have 2½ inch threaded port outlets which firefighters use to connect fire hoses to extinguish fires on the upper floors of high rise buildings. Some high rise buildings are required to have 1½ inch hose lines in addition to the 2½ inch port outlets. *See illustration II-B-(1) in Reference Guide.*

Buildings over 275 feet in height are required to have a two zone system. *See illustration II-B-(2) in Reference Guide.*

Sprinkler and standpipe control valves are usually located in the basement. This is the lifeline of the fire protection system. A sprinkler or standpipe that is out of service can give a false sense of security to the occupants of a high rise building. Both should be in full operation. Building management is required to give prior notice to the fire department in the event of any sprinkler or standpipe repairs or emergency shut down.

C. FIRE PUMP

Whenever a building's existing water supply, whether it is a public main or other source, is insufficient to meet the demands of its fire protection system, a fire pump is installed. Fire pumps are used to provide or enhance the water supply pressure available from the public water mains.

Fire pumps are an important component of the fire protection system. The Chicago Fire Codes require that these pumps be tested annually and that these tests be witnessed by the Chicago Fire Department. Fire pumps must perform to their rated gallons per minute and pressure to ensure proper and adequate flow of water supply.

As with sprinklers and standpipe systems, building management is required to give prior notice to the fire department in the event of any fire pump repairs or emergency shut down.

III. SMOKE-PROOF TOWERS

A smoke-proof tower is an enclosed stairwell designed to limit the penetration of smoke, heat and toxic gases, providing a safer atmosphere for occupant evacuation in the event of a fire.

A smoke-proof tower may be used in lieu of any required interior stairwell. At least one smoke-proof tower is required in every high rise building that exceeds 264 feet in height. These towers are constructed with a three (3) hour fire resistive rating. If more than one(1) smoke-proof tower is provided, this rating can be reduced to two(2) hours. *See illustration III-A in Reference Guide*.

IV. ELEVATOR RECALL

Elevator emergency recall is a system which is programmed into the elevator to send it non-stop to the main floor so the fire department can take control of the elevator in a fire situation or emergency. This control of the elevator is called *fireman service mode*. When elevators are in the *fireman service mode*, they cannot be used by anyone but firefighters.

Keys used by firefighters to recall the elevators are found in the fireman's recall box, installed in a conspicuous location on the main floor of the elevator lobby. The size of the box, the construction and the type of lock must be approved by the Chicago Fire Department.

PORTABLE FIRE EXTINGUISHERS

Portable fire extinguishers can save lives and property by putting out a small fire or suppressing it until the fire department arrives; however, portable extinguishers have limitations. They are not designed to fight large or fast-spreading fires. Most portable extinguishers have a short range (6-10 feet) and completely discharge in a very short time (8-10 seconds). As a general rule, firefighting should be left to the professionals. The Chicago Fire Department recommends that they be called in the event of any fire.

Modern fire extinguishers can put out small fires, but using a portable fire extinguisher is a good idea only under certain conditions. All fires are unpredictable and should be approached with caution. No step-by-step list can take the place of experience and training. Anyone who uses a fire extinguisher should be trained and familiar with them. With that in mind, before you consider fighting a small fire, you should know the following:

- ✔**Make sure the Fire Department is notified. As soon as you know there is a fire call 9-1-1.**

- ✔**Never fight a fire unless you are sure you have the proper type and size of extinguisher and that you know how to use it.**

- ✔**Begin fighting the fire from a safe distance.**

- ✔**Never let the fire get between you and your exit.**

- ✔**Use the buddy system. Always work in pairs.**

- ✔**Even if you extinguish the fire, the area should be inspected by the fire department.**

- ✔ **The extinguisher must be rated for the type of fire you are fighting.**
  Extinguishers are designed to fight specific classes of fires. What type of extinguisher to use depends on what is burning.

- ✔ **The extinguisher must be large enough to put out the fire.**
  Extinguishers come in various sizes. Larger models can handle larger fires.

- ✔ **The extinguisher must be within easy reach.**
  Never move through a fire to get your extinguisher.

✔ **The extinguisher must be fully charged.**
If an extinguisher is not fully charged it will not do its job.

✔ **The operator must be trained to use the extinguisher**.
During a fire is not the time to learn to use an extinguisher. You should be familiar with each type of extinguisher available to you.

When operating portable extinguishers, personal safety and the safety of others are the most important factors in deciding to fight a small fire. Before fighting a fire be sure of the following:

✘ **Everyone has left, or is leaving the building/area and the fire department has been called.**

✘ **The fire is confined to a small area.**

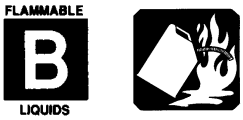
✘ **There is an unobstructed exit available. Don't let the fire get between you and your exit.**

✘ **Stay low because the room will rapidly fill with smoke.**

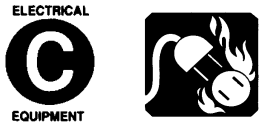
✘ **If in doubt, leave the area immediately. Close off the area to slow the spread of the fire.**

It is essential that the type of extinguisher you use is appropriate for the type of fire you are fighting. The A, B, and C classification describe the fire's fuel, and what is burning.

Class A fires involve "ordinary combustibles" - wood, paper, cloth, rubbish, rubber and many plastics.



Class B fires involve flammable liquids - oil, greases, tar, oil based paint, lacquers, flammable gasses, and some plastics.



Class C fires involve "energized" electrical equipment - appliances, televisions, radios, computer equipment, wiring, and circuit breakers or fuse boxes.

Class A, pressurized water extinguishers, are common in retail and office settings. Water is stored in the extinguisher cylinder and is expelled through a short hose. Water extinguishes Class A fires by cooling the fuel below its kindling temperature.

Class B&C, carbon dioxide extinguishers, are common where electrical equipment is prevalent. When activated, carbon dioxide is expelled under pressure through a horn at the end of a short hose. The fire is extinguished by reducing the amount of oxygen in the air around the fire.

Class A, B & C, multipurpose dry-chemical extinguishers, are common in office and home settings. Dry-chemical (ammonium phosphate) is stored in the cylinder and expelled through a nozzle or short hose. The fire is extinguished by interrupting the chain reaction that keeps the fire burning.

There are four basic steps to operating a fire extinguisher. An easy way to remember the procedure is to think of the word "*PASS*"

<u>PULL</u> THE PIN

Holding the extinguisher with the nozzle pointing away from you, pull the pin, which is located below the trigger.

<u>AIM</u> LOW

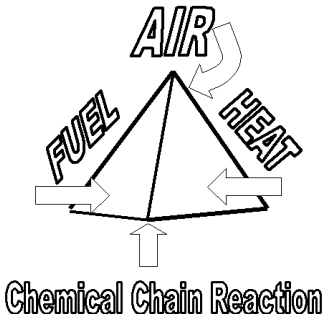
Standing 6-8 feet away from the fire, point the nozzle at the base of the fire. Always hold the extinguisher vertically. Never hold it horizontally or at an angle.

<u>SQUEEZE</u> THE TRIGGER

Squeeze the trigger slowly and evenly. This will expel the extinguishing agent.

<u>SWEEP</u> FROM SIDE TO SIDE

As the agent is being expelled, sweep the nozzle from side to side. As the fire begins to go out, move closer to the fire and continue the sweeping motion until the fire is extinguished. If the fire does not diminish or it grows, get out of the building. Close any doors in order to contain the fire to the immediate area.



Fires require fuel, heat, oxygen and a molecular chain reaction. Once a fire has started, it will continue to burn because of the reactions created between these four components. Fire experts call this model the "Fire Tetrahedron". Removing any one of these components will cause the fire to be extinguished. Fire extinguishers put out fires by combinations of three basic methods:

➜ Cooling the fuel below the temperature at which it will burn.

➜ Cutting off the oxygen supply.

➜ Interrupting the chemical reactions that keep the fire going.

EMERGENCY EVACUATION FOR PEOPLE WITH DISABILITIES

The provisions of these sections reflect minimum requirements which are not intended to restrict owners from implementing additional measures as warranted, provided that they do not conflict with provisions of the Americans with Disabilities Act.

- **List of name(s) and normal floor location(s) of regular occupants who have voluntarily self-identified as needing assistance and the type of assistance required to swiftly exit the high rise building in case of emergency.**

1. Identifying Those In Need of Assistance

- The FSD and DFSD must, at all times, ensure that the Emergency Evacuation Plan includes the most updated list of individuals who have voluntarily self-identified the need for assistance. This list must also include the type of assistance those individuals would need to safely exit a building in the case of an emergency.

- In commercial buildings, building owners should obtain their lists from employers or tenants who have undertaken the following procedures for identifying employees or regular occupants requiring assistance in the case of an emergency:

  a. All employees, after a job offer has been made, should be asked if they will need assistance in the case of an emergency.
  b. To update and maintain lists, employers or tenants should survey all of its current employees or regular occupants, with or without disabilities, to determine whether they will require assistance in case of an emergency, as long as the employer makes it clear that self-identification is voluntary and explains the purpose for requesting the information.
  c. Employees or regular occupants should be surveyed on an annual basis through the distribution of a confidential questionnaire asking if they will require assistance, and what type of assistance they need.

- In residential buildings, building owners are responsible for contacting all regular occupants, with or without disabilities, to inform them of the procedure by which they may voluntarily self-identify that they need assistance, and the type of assistance they require to exit a building in the case of an emergency. The method for contacting tenants should be through the distribution of a confidential questionnaire.

a. Regular occupants shall be informed of the procedure upon moving into the building and on an annual basis thereafter.
b. Regular occupants needing assistance should also be urged to contact the Chicago Fire Department to inform them of any assistance needed in the case of an emergency or to request the Chicago Fire Department Registration Card.

2. ***Confidentiality***

- While individuals listed in the "Plan" have voluntarily self-identified that they would need assistance in the case of an emergency, the information they have provided must be kept confidential and shared only with those who have responsibilities under the emergency evacuation plan.
  a. The employers or building owner shall inform all individuals who have self-identified the need for assistance that the information provided will be kept confidential and separate from the personnel files and shared only with those who have responsibilities under the emergency evacuation plan.
  b. Lists must be made available to emergency personnel, but otherwise held in the strictest of confidentiality.

3. ***The Need for Assistance***

- Once identified, individuals must be consulted about what specific assistance they would need and how it can best be provided.
  a. An employer or building owner must ask individuals who indicate a need for assistance, what type of assistance they will need.
  b. The employer or building owner shall meet with an individual who has requested assistance to obtain more detailed information regarding the method of evacuation. Methods for accommodation and assistive devices should be selected and discussed. Examples of assistance are evacuation chairs, evacuation assistants, specific information about areas of refuge or rescue, tactile/vibratory pagers for individuals who are deaf or hard of hearing, and guides for individuals who are blind or visually impaired.

  c. The employer or building owner is entitled only to the information necessary to fulfill its responsibilities under the Emergency Evacuation Plan.

4. ***Types of Requested Assistance***

- When individuals voluntarily self-identify that they need assistance, they will be asked to identify the specific type of evacuation assistance they need. Those options may include, but are not limited to, the following:

a. *Evacuation Assistants*
For each such occupant, the Emergency Evacuation Plan shall identify an individual who is either one of the designated personnel such as FSD, DFSD, Building Evacuation Supervisor, Fire Wardens and Emergency Evacuation Team members, or is otherwise assigned to assist such occupant during an evacuation or safety drill.

Evacuation assistants can be either designated by the employer, tenant, building owner or selected by the individual requiring assistance, provided that the evacuation assistant selected is in agreement. Scheduled emergency plan reviews should include checking the status of evacuation assistants.

b. *Evacuation Chairs*
Evacuation chairs are assistive devices in which individuals who use wheelchairs or have other mobility impairment that make the use of stairs difficult are securely seated as they are moved during an evacuation. All evacuation chairs requires the assistance of at least one other individual who has been trained in its use. For more information about evacuation chairs, please refer to the Access Board website at http://www.access-board.gov or contact the Mayor's Office for People with Disabilities at (312) 744-4495.

c. *Guides for individuals who are blind , visually impaired, cognitively impaired or mentally ill*

d. *Tactile/Vibratory pagers for individuals who are deaf or hard of hearing*

- **Description of the designated location(s) of place(s) of refuge or rescue, if any, for all building occupants in an emergency.**

1. A Place of Refuge or Rescue

- An area, which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.
- Places of refuge or rescue must comply with *Americans with Disabilities Act Accessibility Guidelines - 4.3.11 Areas of Rescue Assistance (see Appendix in Reference Guide)*

2. Signage

- During an emergency evacuation, signage is imperative in directing large numbers of people out of a building in an orderly fashion.

- All signage must comply with *Americans with Disabilities Act Accessibility Guidelines - 4.30 and 4.3.11.5 Signage (see Appendix in Reference Guide).*
  a. Stairwell Identification.
  b. Areas of Rescue Assistance

After Working Hours

- Most office fire fatalities occur outside of normal working hours. Fires can grow unnoticed and persons working alone can be cut off from their normal egress route. In many buildings, only a few people working late and the housekeeping staff are present at night. Building managers should ensure that there is a process in place for employees who may need assistance to alert building security upon entering the building, or when remaining in the building after normal working hours. Someone will then be ready to search for and/or assist the individual to safety, if needed. Alternatively, the person could be instructed to telephone the fire department as to their location when an emergency occurs.

Common Communication Skills & Assistance Techniques for People with Disabilities *(Source: Federal Emergency Management Agency)*

- People with disabilities are frequently misrepresented due to inappropriate and unrealistic portrayals by the media. Some disabilities are highly visible, while others are invisible. Following general guidelines on how to effectively communicate with people with all types of disabilities is crucial during an evacuation. Regardless of the disability, however, all people with disabilities should be treated as a person - not as an object.

CITY OF CHICAGO **EMERGENCY PREPAREDNESS CERTIFICATE**

SAMPLE EXAMINATION

Name: _____ **Date: _____**

Indicate the correct answer by circling the proper letter.

1. In *Category 1* high rise buildings, each plan shall require safety drills to be carried out under the direction of:

A. The building owner
B. Fire warden
C. Fire Safety Director
D. None of the above

2. Safety drills may occur on a floor by floor basis, and may conclude when all participating occupants have fully entered and begun using:

A. The corridor
B. The basement
C. The area of rescue assistance
D. The designated stairwell

3. Buildings that are required to file high rise plans, must file them with the:

A. City's Office of Emergency Communication
B. Department of Law
C. Chicago Fire Department
D. Office of Special Events

4. Alphabetical and directional letter identification for the stairwell and the floor number sign to which floor the door opens is to be provided where?

A. In the interior stairwell enclosure on every even numbered floor.
B. In the interior stairwell enclosure on every floor adjacent to the stairwell door.
C. In the interior stairwell enclosure on every odd numbered floor.
D. In the interior stairwell enclosure on every 5^{th} floor.

5. A thorough building safety inspection is conducted from the

A. Basement and progresses up through the building.
B. Center of the building and progresses to the roof.
C. Roof and progresses down through the building, floor by floor.
D. Center of the building and progresses to the basement.

6. According to the Chicago Fire Code, if oily rags are found during an inspection, the rags

A. Should be allowed to remain on the floor.
B. Be placed in an open, heavy plastic can.
C. Should be moved toward the elevator switch box.
D. Be placed in a metal, self-closing can.

7. Any rubbish found in a high rise building should be removed immediately.

A. True
B. False

8. In a fire, stairwell doors that do not close and latch properly can cause:

A. The doors not to open
B. The doors to squeak
C. Smoke to fill the stairwell, making it unuseable during an evacuation
D. None of the above

9. In storage rooms, stock should not be stacked higher than _____ below the ceiling or sprinkler head.

A. 18 inches
B. 38inches
C. 10inches
D. 5 inches

10. When inspecting the lobby of a high-rise building, all exterior exit doors must open easily and without a key.

A. True

B. False

11. The panic bar on an exit door should be easy to press when opening the door.

A. True
B. False

12. In the event that a total evacuation is required, an "all call" can be made from the fire command panel instructing the occupants to evacuate.

A. True
B. False

13. All stairwell doors which are locked from the stairwell side are automatically unlocked from a switch at the:

A. Rear door
B. Kitchen
C. Fire Command Panel
D. Office of the Building

14. In high rise residential buildings, smoke detectors are required in dwelling units within _____ feet of the entrance to all sleeping rooms.

A. 60
B. 30
C. 15
D. 20

15. Building management is required to give prior notice to the Fire Department:

A. In the event of any fire pump repairs or emergency shut down
B. Before a safety inspection is conducted
C. After a safety inspection is conducted
D. When the fire safety director goes on vacation

16. A smoke-proof tower is an enclosed stairwell designed to limit the penetration of smoke, heat and toxic gases, providing a safer atmosphere for occupant evacuation.

A. True

B. False

17. In a high-rise office building, the fireman's elevator key box is located

A. In the Building Engineer's office.
B. On the main floor of the elevator lobby.
C. Inside the first floor standpipe hose cabinet.
D. Outside the elevator penthouse.

18. The basic four basic steps to operate a fire extinguisher are: pull the pin, aim low, squeeze the trigger and sweep from side to side.

A. True
B. False

19. Extinguishers are designed to fight specific classes of fire.

A. True
B. False

20. A *Class A* fire consists of:

A. Wood, paper, cloth
B. Oil, grease, tar
C. Electrical, radios, circuit breakers
D. Automobile parts

21. Fire involving flammable liquids & oil are designated as what type of fire?

A. *Class A*
B. *Class B*
C. *Class C*
D. *Class D*

22. In an emergency situation, elevators are for firefighting personnel only and not for evacuation.

A. True
B. False

23. Who ensures that the Emergency Evacuation Plan includes the most updated list of individuals who have voluntarily self-identified the need for assistance?

A. Fire Warden
B. Emergency Supervisor
C. Deputy Fire Safety Director
D. The Fire Safety Director and the Deputy Fire Safety Director

24. While individuals listed in the "plan" have voluntarily self-identified that they would need assistance in the case of an emergency, the information they have provided must be:

A. Placed on the city's web site.
B. Given to all occupants of the building.
C. Kept confidential and shared only with those who have responsibilities under the Emergency Evacuation Plan.
D. None of the above.

25. When individuals voluntarily self-identify that they need assistance, they will be asked to identify the specific type of evacuation assistance that they will need. Those options may include:

A. Evacuation assistants
B. Guides for individuals who are blind, visually impaired, cognitively impaired or mentally ill
C. Tactile/Vibratory pagers for individuals who are deaf or hard of hearing
D. All of the above

26. A place of refuge or rescue is an area which has direct access to an exit where people who are unable to use stairs may remain temporarily in safety to await further instruction or assistance during an emergency evacuation.

A. True
B. False