

Stairwell Use During an Emergency

Considerations

Stairwell usage during an emergency is for the safe evacuation of personnel, as well as access for emergency responders. In order to be as prepared as possible for the needs of everyone, the emergency plan must consider those persons needing extra assistance, as well as the responders assisting them.

- People with disabilities should be consulted and be part of the decision making process with regard to the evacuation plan when possible--particularly when related to emergency movement in stairwells.
- Evacuation chairs are not a singular answer to evacuating employees with mobility impairments. Because people have different needs during an emergency evacuation, consult with employees with disabilities to determine what kind of evacuation device would work for them. While many types of evacuation and transport chairs exist, there are no established standards for these devices.
- Planning for the use of evacuation chairs must be based on a person's location and the staff available to assist during an emergency. (e.g., certain evacuation chairs only descend stairways, so they would not be helpful for a person in evacuating from a basement or parking garage)
- For some emergencies (e.g., fire, hazardous material or viral outbreak), the proximity of the hazard to the people who must be evacuated will determine what would be the best response. In cases in which there is a significant distance between the person and the emergency, alternate means of evacuation, horizontal evacuation, and areas of refuge may be an alternative to evacuation through the stairwell. (In the case of hazardous material emergencies, pressure ventilation, filtration control, air control and HVAC systems may be factors in the decision to evacuate.)

People with disabilities may need additional assistance evacuating if stairways are a part of their evacuation route. A multi-faceted approach, including evacuation devices, wheelchairs, transfer devices and staff support, may be required.

- Plan for a person's personal mobility either as soon as they exit the stairwell or once the evacuation is complete, particularly for personnel with mobility impairments. (Employees may need to go home or return to the office once the evacuation is complete.) Many transportation chairs and evacuation devices do not allow for independent mobility of the person being transported. In such instances, the person with a disability would need an assistant to operate the device.

Examples:

- *The U.S. Department of Agriculture uses a plan of evacuation that includes transportation chairs, as well as different types of evacuation chairs and staff assistance to evacuate people with mobility impairments from different sections of the*

building. Because they have to evacuate people from the basement as well as upper floors, the plan addresses the needs of employees regardless of their location in the building.

- *At the Access Board, employees who are not providing assistance have been encouraged to exit with the manual wheelchairs belonging to those individuals using evacuation chairs. It is understood that this may not be practical in all cases. When it is, individuals in evacuation chairs will have the opportunity to transfer back into their wheelchairs and move further away from the building in a more efficient and independent manner.*
- *At the U.S. Department of Labor, manual wheelchairs have been stored in strategic locations on the ground floor of the building. These chairs provide a readily accessible means of quickly evacuating staff with mobility disabilities, as well as provide an alternative method of mobility for any personnel that may have been evacuated from upper floors on evacuation devices.*

All safety routes, including stairwells, should provide safe passage, have the facilities necessary for evacuees to find their way, and (in the case of extreme emergency) provide a means for all occupants to effectively communicate their location to emergency personnel.

- Encourage all who work in the building or visit regularly to familiarize themselves with multiple ways out. This should include the stairwells. Blind or low vision personnel should also be encouraged to practice “way-finding” and other methods for learning egress routes.
- Added structures (e.g., reinforcement, emergency lighting, signage and fire doors) may be required to ensure the route to safety remains clear, adequate emergency lighting is available, and standardized accessible signage is readily accessible in the stairwell.

Consult the National Fire Protection Association (NFPA), and State and local government standards and regulations for stairwells. Additional guidance related to stairways and stairwells is also located in the Uniform Federal Accessibility Standards, and the Architectural Barriers Accessibilities Standard. Because each facility is unique, refer to the code specifically affecting your workplace when developing an evacuation plan using stairways and stairwells. (Some examples below.)

- 2006 NFPA Life Safety Codes (2006 NFPA 101- 7)
- NFPA Emergency Evacuation Planning Guide for People with Disabilities. NFPA, March 2007
- OSHA Standard 29 CFR 1910, Subpart B, Means of Egress
- Uniform Federal Accessibility Standards (UFAS)

Glossary

- **Evacuation devices:** These devices help quickly evacuate people with mobility limitations down or up stairs or across rough terrain. Not all of these devices are designed to be used independently by the evacuee, and in most cases require the assistance of another person to operate. Types of evacuation devices include transport chairs, evacuation chairs, or any device specifically designed to aid personal mobility during an evacuation (e.g., wheelchairs).
- **Transport Chair:** Device for moving a person with a mobility disability over a flat surface. It is often a chair with very small wheels or any other wheeled device. It allows very limited personal mobility and is not appropriate for travel over any rough terrain.
- **Evacuation Chair:** Device designed to allow a person with a mobility disability to be transported down stairs. Most evacuation chairs are not able to be solely operated by the occupant, may only be used to travel downstairs, and offers no independent mobility for occupants once travel downstairs has been completed.
- **Transfer device:** Any device to aid in the lifting, moving, and transferring of a person with a mobility disability from one device to another.
- **Wheelchair:** Wheeled mobility device which is propelled either manually (by pushing the wheels with the hands) or by automation, the path of which is determined by the occupant.
- **Egress –** The act of going or coming out.

Critical Questions

- Have employees with disabilities been consulted in relation to the purchase and use of evacuation devices to ensure the devices are appropriate for their specific disability, particularly during evacuations using stairwells? Does your evacuation plan consider the independent mobility needs of employees after they have used the evacuation devices? Have the possible evacuation needs of visitors with disabilities also been considered?
- Have blind or low-vision personnel been encouraged to learn and practice multiple stairwell egress routes using way-finding or other methods?

- Are there redundant emergency notification systems in place that are accessible to employees who are deaf or hard of hearing (e.g., text messaging, vibrating paging devices, pop-up messaging on computers, enunciators, etc.)? Were employees with disabilities consulted during the planning and implementation phases of these systems?
- Do the emergency communication options in place take into consideration the needs of people with disabilities, particularly with regard to the capability of two-way communication from within stairwells?
- Has consistent accessible signage been placed in the stairwells that identifies the specific location of the stairwell, so that an individual in need of assistance may communicate their location clearly to emergency responders? Are the locations of exits also clearly posted with accessible signage such as audible, directional, or tactile signage?
- Recognizing that there is no way to predict how egress routes (the way out) will be affected in an emergency, have the following been adequately considered to ensure the egress route is as clear as possible prior to an emergency?
 - Accessible routes to the emergency egress stairwells via the corridors are clear;
 - The stairwells are not blocked;
 - There is adequate emergency lighting, in the case of power failure; and
 - The stairwell entrance and exit doors are unlocked.
- Do the plan and training exercises provide multiple evacuation routes in case the stairway is blocked or planned assistance is unavailable? How are alternate means of evacuation, horizontal evacuation, or areas of refuge for persons with disabilities addressed in the plan?
- Does the Agency's emergency plan include guidance and training on stairway evacuation from all areas of the building (i.e., garages, basements, cafeterias and

training areas, etc.)? Does the training include use of all stairwell evacuation equipment?

- Do the stairwells meet the applicable stairwell guidelines and standards defined by the National Fire Protection Association (NFPA), the Uniform Federal Accessibility Standards, and the Architectural Barriers Act Accessibilities Standard? If they do not, what are the short and long-term next steps to ensure the stairwells in the building meet all applicable standards and guidelines?