

# EMERGENCY EVACUATION

How prepared are you?



A guide to emergency evacuation  
procedures in the workplace

**EVAC+CHAIR<sup>®</sup>**

THE WORLD'S NO.1 STAIRWAY EVACUATION CHAIR SINCE 1982

# INTRODUCTION

## Why we need a plan

**Nobody expects an emergency or disaster - especially one that affects them, their employees, and their business personally. Yet the simple truth is that emergencies and disasters can strike anyone, anytime, and anywhere. You and your employees could be forced to evacuate your company when you least expect it.**

With the current unpredictable climate of terrorism and violence, along with fire and weather emergencies, effective emergency evacuation plans are vital. Extra precautions and considerations need to be taken into account to accommodate the individual needs of staff and visitors with physical disabilities, those with sensory disabilities, and those who may lack understanding of a situation or be able to act quickly.

Although Title III of the ADA broadly addresses “discrimination on the basis of disability in the activities of places of public accommodation such as restaurants, movies and schools”, evacuation procedures in the workplace are historically written for a person with a disability to shelter in place on the landing of a stairwell and wait for first responders arrival to be rescued. **Imagine, for a moment, you or a member of your family being left behind?**

Identifying and preventing risk is a crucial part of emergency planning in the workplace and should never allow leaving anyone behind because they are differently abled. Pre-planning for a workplace emergency is imperative in today’s world. Workplace facilities must have the capacity to move all persons with disabilities to a safe location immediately in any emergency situation. Sheltering in place and waiting for first responders to arrive and rescue may not be safe or the best option. Robust emergency and evacuation planning should be implemented and comprehensively written with specific needs of individual staff requirements.

### **This plan should insure and include:**

- full risk identification and prevention
- drills (identifying obstacles as they arise and before an emergency occurs)
- equipment required and its usage
- training needs
- post drill evaluation to inform any changes necessary etc.

Staff and visitors with disabilities can also be at risk. College administrators and staff should develop a plan to necessitate provisions and share the information with all people concerned. Through the entire process, the facility has a moral, ethical and legal responsibility to keep their whole community safe in the event of an emergency.

# EVACUATION STRATEGIES

3 main evacuation strategies that are implemented as part of the emergency procedures for workplace facilities

## Simultaneous Evacuation

This strategy is appropriate for many types of workplace facilities, normally smaller premises where personnel and visitors can escape quickly and immediately to a place of total safety in open air and where it may be expected that all people inside are able to (and will) evacuate quickly to outside the building to a place of total safety. This strategy may also be appropriate in more complex premises for visitors and staff not required to assist with evacuation of other residents.

## Horizontal/Progressive

*Evacuation where staff evacuate personnel behind fire compartments away from the fire.*

These are areas separated from each other on the same level by walls and doors that provide at least 30 minutes of fire resistance. If a fire occurs, personnel can be moved away from the affected area to the adjoining protected area. The individuals may remain there until the fire is dealt with or await further evacuation to another similar adjoining area or down a protected route to total safety.

## Delayed Evacuation

*Personnel remain in fire protected rooms or refuges until the danger has passed or until they can be taken to a place of total safety.*

Exceptionally, in some situations it may not be desirable or practical to evacuate some individuals immediately (e.g. because of physical/medical conditions, pregnancy etc.). In these circumstances, it may be appropriate to allow them to remain in their current location while the emergency is dealt with and the danger has passed, or to allow for the additional time necessary to prepare them for evacuation. In such circumstances, it will be necessary to provide enhanced levels of structural fire protection to the individual room(s). However, where this strategy has been adopted; a suitable evacuation plan will still be required.

Whichever system of evacuation you use must be supported by suitable management arrangements. It is essential that your evacuation strategy is fully detailed in your emergency plan and included in your staff training programme.

# LEGAL CONSIDERATIONS

## **NFPA 101, 2015, section 7.2.12.2.3:**

Safer alternative stair descent measures for transporting a person who normally requires a wheelchair, or otherwise cannot use stairs, include emergency stair travel devices designed, constructed, and operated in accordance with ANSI/RESNA ED-1, Emergency Stair Travel Devices Used by Individuals with Disabilities.

## **United States Access Board Required Compliance with the IBC:**

Evacuation plans and procedures should address the needs of all facility occupants, including those with disabilities. Mobility aids, such as emergency stair travel devices, also known as evacuation chairs, are available to transport people unable to use stairs. The Rehabilitation Engineering and Assistive Technology Society of North America (RESNA), [www.resna.org](http://www.resna.org), has developed consensus Standards for emergency stair travel devices through the American National Standards Institute (RESNA ED- 1). It is important that evacuation chairs be located so that they do not obstruct required means of egress.

## **The Rehabilitation Act of 1973 Section 501:**

Section 501 of the Rehabilitation Act prohibits discrimination on the basis of disability in Federal employment and applicants for employment. Federal agencies are required to make reasonable accommodations for qualified employees or applicants with disabilities.

## **Disability Discrimination & Reasonable Accommodation:**

A reasonable accommodation is any change in the work environment to help a person with a disability apply for a job, perform the duties of a job, or enjoy the benefits and privileges of employment.

## **Americans with Disabilities Act of 1990:**

The Act prohibits discrimination against people with disabilities in employment (Title II), in public accommodations.

## **PART 1630—Regulations to implement the Equal Employment Provisions of the Americans With Disabilities Act**

Section 1630.2(o)Reasonable Accommodation: One of these is the accommodation of making existing facilities used by employees readily accessible to, and usable by, individuals with disabilities.

## **Maryland House Bill 1061:**

Education - Emergency and Evacuation Plans - Individuals With Disabilities Requiring the State Department of Education, in consultation with disability advocacy groups, to update specified guidelines to accommodate, safeguard, and evacuate students, staff, and visitors with disabilities on public school grounds; requiring each local school system, on or before July 2018.

# PLANNING CONSIDERATIONS

**State and local governments are required to make emergency preparedness programs available to persons with disabilities and others with access and functional needs. The best way to gain insight into the critical needs and issues that people with disabilities and others with access and functional needs face during emergencies is to involve representatives from the community, as well as providers of functional needs support services, in the planning process and when conducting exercises on a plan. A Department of Justice reference that captures these goals is titled, “Making Community Emergency Preparedness and Response Programs Accessible to People with Disabilities.”<sup>9</sup>**

“Jurisdictions may begin taking measures to insure the inclusiveness and legal compliance of their emergency preparedness programs by”<sup>10</sup> engaging in the following preparedness and planning- related activities (note that this is not a comprehensive list of all programmatic considerations needed to ensure the inclusiveness of plans, programs, and services):

## **Planning for People with Disabilities and Others with Access and Functional Needs**

- Inviting people with disabilities and others with access and functional needs to participate in the emergency planning processes, including reviewing and updating old plans, and developing new plans;
- Creating/assigning a planning position within the emergency management organization to advocate for people with disabilities and others with access and functional needs;
- Multi-agency approach to ensure a 360 view of evacuation is taken;
- Developing new, needed plans;
- Using the DOJ’s ADA Tool Kit as a model for compliance;
- Purchasing accessible equipment and resources as needed;
- Establish a training schedule to cater for all PEEP requirements;
- Establishing a long-term recovery working group or committee that includes representation for people with disabilities and others with access and functional needs.<sup>11</sup>

<sup>9</sup> U.S. Department of Justice Civil Rights Division Disability Rights Section. “Making Community Emergency Preparedness and Response Programs Accessible to People with Disabilities”. Date last accessed. 3/1/2017. <sup>10</sup> Elizabeth M. Webster, J.D. Journal of Emergency Management, Vol 12 #3, May/June 2014. “Emergency Planning for People with Disabilities and Others with Access and Functional Needs to Ensure Inclusiveness.” Page 5. Some of these examples were developed in response to the recent investigations and litigation, which have prompted a shift in the way the field of emergency management prepares and plans for people with disabilities and others with access and functional needs. This may not be a comprehensive list of considerations that must be met in order to ensure a preparedness program is compliant with the appropriate laws and statutes. <sup>11</sup> Elizabeth M. Webster, J.D. Journal of Emergency Management, Vol 12 #3, May/June 2014. “Emergency Planning for People with Disabilities and Others with Access and Functional Needs to Ensure Inclusiveness.” Page 5.

# EMERGENCY EVACUATION PLANS

The following self-assessment is intended to assist emergency managers and planners with evaluating, developing, and updating emergency plans, programs, and services to make them inclusive so they meet the needs of the whole community. Specific areas of consideration include:

## Preparedness

- External Outreach
- Training and Exercise
- Planning

## Response

- Shelter-in-Place
- Evacuation Support
- Emergency Shelters

## Recovery

- External Outreach
- Disaster Recovery Service

## GEEP (Public/Visitor)

### Generic Emergency Evacuation Plan based on foreseeable evacuation issues with people present in building

The purpose of a Generic Emergency Evacuation Plan (GEEP) is to enable visitors to the building with restricted mobility or those who may not be able to evacuate unaided to become familiar with the layout, evacuation procedures, available equipment and communication devices.

#### Points to consider:

- Clearly visible evacuation procedures
- Consider persons with sight/hearing impairment
- Adequate staff training in use of assistive equipment and procedures
- Regular reviews especially if the building has in any way been modified
- Visitors will often be totally unfamiliar with the layout of your premises
- Visitors share their needs upon entry

## PEEP (Staff)

### Personal Emergency Evacuation Plan based on person specific risk assessment

#### What assistance does a person require?

- To evacuate safely or reach a safe refuge at sufficient speed
- To evacuate the building to an assembly point

#### How will they provide this?

- Test and practice procedure with staff member if possible
- Review your PEEP regularly
- And after any planned or emergency drill. Make changes as needed

# GEEPS & PEEPS

## Points to plan for

- 1** Appoint a suitably qualified person to carry out a risk assessment in relation to the emergency evacuation of all personnel and visitors, including the mobility impaired. A person-centred risk assessment will be required where specific risks are identified.
- 2** The community is always growing and changing, and known and new threats and hazards threaten the lives and property of residents in the community;
- 3** Consider the mobility of existing staff and visitors as well as potential limitations of anyone accessing the site in the future. This must take account of their physical, mental (including learning) and age related health and mobility restrictions.
- 4** Consider number and location of staff and others likely to be on site at various times during and outside normal working hours.
- 5** Consider the number, location and suitability of evacuation routes. Remember to include corridors, staircases, exits and the suitability of the designated assembly point(s).
- 6** Consider the type of alarm systems currently in use. Do they take account of the range of disabilities of those who may be present?
- 7** Devise and implement an appropriate emergency evacuation plan, making everyone aware of the evacuation procedure and system.
- 8** Select and train suitable individuals to carry out specified duties during the evacuation (i.e. first aiders, fire wardens, dedicated escorts and Evac+Chair Operators). NOTE: Fire Wardens may have other duties and might not be selected to carry out the role of Evac+Chair Operators/Dedicated Escorts.
- 9** Carry out regular fire drill procedures to ensure familiarity and efficiency of premises evacuation. Consider the time taken to evacuate the premises. Test fire alarms weekly. Use evacuation chairs during practice.
- 10** Monitor and review performance. Do any specific areas of concern still exist in relation to individual departments or individuals with mobility impairment?
- 11** Review at least annually and revise evacuation plan accordingly in light of any real emergencies to evaluate the effectiveness and note and changes needed going forward.
- 12** Consider the needs of new staff during induction.

# EVACUATION EQUIPMENT

## Perfect solutions

### Evacuation Chairs

**Evac+Chair is a universal evacuation solution for smooth stairway descent during an emergency. Single user operation insures no heavy lifting or manual handling is required during emergency evacuation procedures.**

In the event of an emergency such as an earthquake or a fire, elevators should not be used in multi-storey buildings, therefore people with a disability or who are injured may become trapped. Our evacuation chair is the perfect solution; it is a light weight and easy to use device which glides effortlessly down stairways to assist with the quick and safe removal of people who are mobility impaired in the event of an emergency evacuation.



### Evacuation Sleds

**An evacuation sled is designed to help evacuate non-ambulant people or people who may not be able to walk down stairs in an emergency. It can be used for children to adults 6 foot 6 inches (198cm.) tall.**

Evacuation sleds can be used in office buildings, theatres, libraries, hospitals, colleges etc. Even if a mobility impaired person does not work in the building, a mobility impaired visitor could be in the building when there is a power failure or fire, and they will not be able to use the stairs to evacuate. When not in use, they can hang from a hook or be stored in a closet, ready to use when an evacuation is necessary.



# CONCLUSION

**The key to ensuring you are prepared for any eventuality is to plan regular fire drills, which as a general rule should take place twice a year, where you should practice with your evacuation equipment like the Evac+Chair from Evac+Chair North America.**

An emergency evacuation can happen at any time without warning, so the practice of these fire drills can save time and lives in an emergency.

## Evacuation Checklist

	Y	N	N/A
Is the facility equipped with a manual fire alarm system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are manual fire alarm boxes provided in the natural exit access paths?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the distance to any manual fire alarm box not more than 200 ft. of unobstructed horizontal travel on the same floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the facility equipped with a fire alarm system that is activated by fire or smoke detectors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a smoke or heat detector located in each room?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are smoke/heat detectors paint free, visible, and unobstructed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are signs posted warning against disabling, tampering, or interfering with fire detectors and the fire alarm system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the servicing, maintenance, and testing of fire detection systems (including cleaning and necessary sensitivity adjustments) performed only by people trained in the operation and function of the system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are fire detectors cleaned of dirt, dust, or other particulates at regular intervals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is outdoor fire protection equipment protected from corrosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is fire detection equipment protected from mechanical or physical impact?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has an approved fire safety plan been distributed to all staff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the approved fire safety plan include:			
• location of the nearest exits and fire alarms?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• procedures to be followed when a smoke or fire alarm sounds?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• procedures to be followed in the event of fire or smoke?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all staff familiar with the locations of the manual fire alarms?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can the alarm be perceived above ambient noise or light levels by everyone in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# CONCLUSION (cont.)

Y N N/A

Are alarms distinctive and recognizable as a signal to evacuate the building or to perform actions designated under the emergency action plan?

Is a written fire prevention plan available that includes the following?

- A list of major hazardous materials and their proper handling and storage procedures.
- Potential ignition sources and their control procedures.
- The type of fire protection equipment or systems that can control a fire.
- The names and titles of personnel responsible for maintaining fire protection equipment and systems.
- The names and titles of personnel responsible for control of hazardous fuel sources.
- Housekeeping procedures to prevent the accumulation of flammable and combustible waste materials.

Is the evacuation plan conspicuously posted on every floor?

Is the evacuation plan updated to reflect changes in building use and arrangement?

Are all staff trained in the duties they are to perform under the evacuation plan?

Is there a written emergency action plan that includes the following items?

- Emergency evacuation procedures, signals, and routes.
- The use of emergency evacuation equipment e.g. Evac+Chair evacuation chairs.
- Procedures for employees who remain in the facility to shut down equipment before they evacuate.
- Procedures to account for all building occupants.
- Rescue and medical duties.
- Preferred methods for building occupants to report emergencies
- Names and job titles of people who can be contacted for more information regarding evacuation plans.

Are individuals suitably trained to carry out specified duties during the evacuation (i.e. first aiders, fire wardens, dedicated escorts and Evac+Chair Operators).

*NOTE: Fire Wardens may have other duties and might not be selected to carry out the role of Evac+Chair Operators/Dedicated Escorts.*

**If you didn't answer yes to all of the points that apply to your college premises then your plan needs updating. CONTACT OUR SAFETY SPECIALISTS TODAY.**



*For further information on any points highlighted in this document please contact:*

**Evac+Chair North America**  
3000 Marcus Ave, Suite #3E6,  
Lake Success, NY, 11042-1012

**T 516-502-4240**  
**W [www.evac-chair.com](http://www.evac-chair.com)**  
**E [sales@evac-chair.com](mailto:sales@evac-chair.com)**



EVAC+CHAIR® AND ITS SILHOUETTE SYMBOL ARE REGISTERED TRADEMARKS. COPYRIGHT BY EVAC+CHAIR® NORTH AMERICA LLC. ALL RIGHTS RESERVED.

EV/CORP\_FAC\_V1

**EVAC+CHAIR®**

**THE WORLD'S NO.1 STAIRWAY EVACUATION CHAIR SINCE 1982**