

LOURDES GONZÁLEZ PEREA

Position: Head of Accessible Technologies Department_ Accessibility and Innovation Directorate_ ONCE Foundation. Degree in Journalism at University of Malaga and Master in Integrated Technologies and Knowledge Society at UNED. She has worked on the improvement of accessible technologies since 2003. She manages and develops accessibility diagnosis, consulting, training and R&D projects.



NATALÍ GONZÁLEZ VILLARINI

Position: Accessibility officer and expert_ Accessible Technologies Department_ Accessibility and Innovation Directorate_ ONCE Foundation.

Natalí obtained her PhD at the Complutense University of Madrid and received her Bachelor of Arts degree in Journalism at the University of Puerto Rico. Since 2012, she has been working as an Accessibility officer and expert at the ONCE Foundation. She is in charge of several Accessibility to technology projects, designing courses, and preparing Innovaccessibilidad Newsletter. She is currently project manager of European project Accessibilitech. Additionally she develops methodologies for testing and certifying accessibility in technological devices, among others.

Best practices in assisting people with disabilities during an emergency

Author: LOURDES GONZÁLEZ PEREA Author: NATALÍ GONZÁLEZ VILLARINI

People with disabilities and with other special needs such as advanced age, tend to be more vulnerable than others during an emergency. This is due to multiple interrelated factors that includethe nature of their disabilityas well as the social and physical environment surrounding them. Barriers such as stairs, narrow doors or unleveled floor transitions increase the vulnerability of people using wheelchairs making it difficult for them to escape a building during a fire (ESCAP, 2014; Saunders, Aurenche and Scherrer, 2015).

A recurring problem affecting by people with disability is that they are generally perceived as a people that exists on the outskirts of society, with realities and needs that have little to do with the rest of the population. These perceptionscan be dangerous because they feed stereotypes that can lead to serious repercussionsthat can have a severe impact on the lives of these people. For example, it can contribute to make them invisible to society, and to leave their needs and concerns out of product and service design including emergency preparedness plans and protocols.

Another problemis that people with disabilities are not viewed as a diverse group(Kim, 2019). While many of their differences are obvious, there is a persisting belief that they face are the same problems, have the same needs and therefore require the same solutions or services or to be treated the same way. In fact, people who share a disability can have very different needs. Thus, when offering assistance to someone with a disability it is important to keep in mind that they may not fit your idea of a person with a disability.

For example, people with vision disabilities are generally divided into two groups: blind people and people with low vision. While it is true that blind people cannot use their sight to navigate their surroundings, see images or read texts, their needs and choice of aid or assistance can vary greatly.For instance, Braille is a tool commonly used among blind people to get access to information but there are a large number of persons who do not know Braille either because they didn't have the opportunity or the means to learn it. Screen readers require a learning curve, and to be familiar with computers or hand held devices not everyone has access to or the ability to learn how to use them.

People with low vision are even more diverse. There are several types of low vision that generate different needs and abilities. Some people have central vision loss which makes it difficult for them to see the objects in the center of the field of vision. Others have peripheral vision loss. In other words, they have difficulties seeing things out of the corner of their eyes. There are people with low vision who have nocturnal blindness, color blindness, blurry or hazy vision or see things with a yellow tint on it.

Depending on the severity of their loss, some can navigate a street or a space without help or see images and read texts using assistive devices. Others however, need white canes or guide dogs in order to move around particularly at night or in low light environments.

With hearing impaired people, the situation is similar. This disability affects people in many ways, depending on the degree

and type of loss. Some people have very little or no hearing.Others have residual hearing, which varies significantly from person to person.As a result, they use many forms of communication which can include sign language, oral language or both depending on the situation and needs. There are people with profound hearing loss that are not familiar with sign language.

Furthermore, contrary to popular belief, not all hearing-impaired people read lips and not all situations are suitable for lip-reading. If there is not enough light, the person has their mouth covered, their heads lowered or is looking the other way, reading lips is difficult (CNSE, no date).

Also, not all people with hearing disability use hearing aids or cochlear implants, and those who do wear them don't have them on all the time. These devices cannot be used under water or wet environments such as in a shower. They may also run out of battery or be damaged during an emergency.

Regarding people with mobility disability, there is a tendency to view them solely as wheelchair users. While a lot of them do use wheelchair, this disability encompasses various limitations that can affect different parts of the body and has levels of severity that vary depending on the situation (Disability Observatory, 2016).

Some people lack the ability to move a part or an entire limb. Others are able to move their limbs to a certain degree but require the use of mobility aid such as crutches, canes, walkers, etc. These people may have a slower gait than others and have difficulty going up or down stairs.

People with reduced mobility in the upper limbs may find it difficult to carry out many basic tasks. For example, lifting,

carrying or moving objects or making fine motor movements. This means they may have issues opening doors, windows, and operating fire extinguishers, among others.

People with intellectual disabilities are another highly vulnerable group. This disability is very broad and complex and affects the ability to learn, solve problems or react appropriately to different situations. In addition, people who have it may face difficulties communicating or correctly interpreting what is happening around them (Plena Inclusión, s.f.).

People with advanced age can also be highly vulnerable during an emergency. While not all of them have disabilities, they may have similar needs. In fact, a single person can face several limitations that are similar to those with disabilities as a result of the age. For example, low vision, hearing loss, mobility or memory difficulties due to cognitive decline.

Barriers in an emergency

Some of the most common barriers people with disabilities face during an emergency are the following (NFA, 2016):

- Not being warned or alerted about an emergency;
- Inaccessible emergency warning and communication systems. For example, visual alarms or sound alarms without an alternative, communication with emergency services available by voice calls only.
- Emergency exits hard to find
- First responders and other emergency personnel with no proper training on how to communicate or provide assistance to a person with special needs
- Emergency exits and routes with barriers (long distances, stairs, doors or windows hard to handle, etc.)

- Shelters that do not comply with accessibility standards
- Inflexible emergency or evacuation protocols
 - failing to rescue guide dogs,
 - forcing people to leave their assistive devices behind,
 - failing to inform about the ongoing emergency protocol,
 - not knowing how to properly guide a blind person out of the emergency,
 - being overprotective with people who can fend for themselves

Best practices in an emergency

- 1. If you are trying to get a person's attention without much success, consider the possibility that the person is not hearing or seeing you. Try lightly touching their shoulder.
- 2. If you approach a person with the intention of offering assistance, tell them your name, your position and role in the emergency. Some people may not be able to see or to recognize your uniform.
- 3. If you notice that a adult person has a disability, do not treat them as a child, and always speak directly to them even if they have an assistant.
- 4. Avoid using abstract language when giving instructions. Use phrases such as to your left, to your right instead of here or there. People with vision disabilities will understand you better if you are precise in your instructions.
- 5. Provide a sound or a visual alternative to emergency messages conveyed visually or through sound. People who do not see or do not hear will receive the information.
- 6. If your mouth is covered, such as with a half mask, people with hearing disability may not understand you. In the event of communication difficulties, try to leave your face uncovered. If you cannot do it because of safety concerns,

use hand gestures or write down what you are trying to communicate.

- 7. If your job is to establish a shelter or an evacuation route, keep in mind the physical, sensorial or cognitive needs of the people you have to protect and provide assistance
- 8. Some people with disability require assistive devices to carry out basic tasks, such as wheelchairs, crutches, hearing aids and others. When evacuating someone with a disability, make sure they have these devices with them. Keep in mind that guide dogs need to be rescued along with their owners.
- 9. If you have to guide a person with a disability and you don't know how to do it, ask them directly. For example, blind people will need to put their hand above your elbow to walk a step behind you to detect your movements. You may also provide descriptions of the path you must follow.
- 10. If you offer digital or printed safety related information about an area, make sure it is accessible. For websites, follow Accessibility Guidelines for Web Content, defined by the W3C. If the information is printed, use a large font size (minimum 12 points) and make sure the contrast between the font and the background is adequate.

References

UN Economic and social Commission for Asia and the Pacific (ESCAP). (2014). Message on disability-inclusive disaster risk reduction delivered at the 6th AMCDRR. Recuperado de: https://www.unescap.org/announcement/message-disability-inclusive-disaster-risk-reduction-delivered-6th-amcdrr

Saunders, G.; Aurenche, B. and Scherrer, V. (2015). All Under One Roof. Disability-inclusive shelter and settlements in emergencies. International Federation of Red Cross and Red Crescent Societies:

https://www.ifrc.org/Global/Documents/Secretariat/Shelter/Allunder-one-roof_EN.pdf

Kim, S. (February 27, 2019). How People's Misconceptions of Disability Lead to Toxic Microaggressions. Forbes:

https://www.forbes.com/sites/sarahkim/2019/02/27/disabilitymicroaggressions/?sh=d312c72417d2

Confederación estatal de personas sordas (no date). Sobre las personas sordas. Madrid: Confederación estatal de personas sordas. Recuperado de: http://www.cnse.es/psordas.php

Observatorio Discapacidad (2016). La discapacidad física. ¿Qué es y qué tipos hay? http://www.observatoridiscapacitat.org/es/ladiscapacidad-fisica-que-es-y-que-tipos-hay

Plena Inclusión (sin fecha). Discapacidad intelectual. Madrid, España: https://www.plenainclusion.org/discapacidadintelectual/que-es-discapacidad-intelectual

National Fire Association (2016). Emergency Evacuation Planning Guide for People with Disabilities: https://www.nfpa.org/-/media/Files/Public-Education/Bytopic/Disabilities/EvacuationGuidePDF.ashx?la=en