

ADDRESSING THE NEEDS OF PERSONS WITH DISABILITIES DURING AN EMERGENCY







### DISABILITY STATISTICS IN THE UNITED STATES

HOW MANY PEOPLE ARE WE TALKING ABOUT?





According to the American Community Survey (ACS), an annual survey conducted by the US Census Bureau, the overall percentage of people with disabilities in the US in 2015 was 12.6%.



Rates of disability increase with age. In the US in 2015, less than 1.0% of the under 5 years old population had a disability. For those ages 5-17, the rate was 5.4%. For ages 18-64, the rate was 10.5%. For people ages 65 and older, 35.4% had a disability.

In 2015, of the US population with disabilities, over half (51.1%) were people in the working-ages of 18-64, while 41.2% were 65 and older. Disability in children and youth accounted for only 7.2% (ages 5-17) and 0.4% (under 5 years old).



In the US in 2015, an estimated 3.6% of the US population had a hearing disability.

- 2.3% had problems with vision
- 4.8% had issues with cognition
- 6.6% had mobility issues









Number of departures in 2016







Number of departures in 2016

Number of arrivals in 2016







Number of departures in 2016

Number of arrivals in 2016

Wheelchair requests in 2016







Number of departures in 2016

Number of arrivals in 2016

Wheelchair requests in 2016

Wheelchair requests per day







Number of departures in 2016

Number of arrivals in 2016

Wheelchair requests in 2016

Wheelchair requests per day

People transported by ADA Vans







> 1,200,000

Number of departures in 2016

Number of arrivals in 2016

Wheelchair requests in 2016

Wheelchair requests per day > 3,300

People transported by ADA Vans







#### IDENTIFY INCIDENTS THAT MAY RESULT IN AN EVACUATION?

1	 	 	
2	 	 	
3	 	 	
4.			





#### TWO TYPES OF EVACUATION YOU ARE LIKELY TO ENCOUNTER -

A. UNCONTROLLED EVACUATIONS

**B. CONTROLLED EVACUATIONS** 







### UNCONTROLLED TERMINAL EVACUATIONS

WHAT MAY TRIGER AN UNCONTROLLED EVACUATION?

WHAT ARE SOME OF THE CONSEQUENCES OF AN UNCONTROLLED EVACUATION?

WHAT ARE SOME OF THE CONSEQUENCES AN UNCONTROLLED EVACUATION MAY HAVE ON PERSONS WITH DISABILITIES?

WOULD DISABLED PASSENGERS HAVE DIFFICULTY EVACUATING IN AN UNCONTROLLED EVACUATION?







### CONTROLLED TERMINAL EVACUATION

WHAT MAY TRIGER A CONTROLLED EVACUATION?

WHAT ARE SOME OF THE BENEFITS OF A CONTROLLED EVACUATION OVER AN UNCONTROLLED EVACUATION?

DO YOU KNOW WHAT TO DO AND WHERE TO GO IN A CONTROLLED EVACUATION?

IDENTIFY SOME OF THE PROBLEMS DISABLED PASSENGERS MAY HAVE IF THEY ARE

EVACUATED TO A PARKING STRUCTURE.

EVACUATED TO THE SIDEWALK.

EVACUATED TO A GRASSY AREA AWAY FROM THE CTA.



LEFT ON THEIR OWN BECAUSE EVERYONE IS TOLD TO LEAVE THE CTA.





A MAJOR CONCIDERATION WHEN EVACUATING PERSONS WITH DISABILITY FROM A TERMINAL IS THE PATH OF TRAVEL.









WHY IS THE PATH OF TRAVEL OF SPECIAL IMPORTANCE FOR MANY PERSONS WITH DISABILITIES?

PERSONS WITH WHAT TYPE OF DISABILITIES WOULD BE MOST IMPACTED BY THE NEED FOR A CLEAR PATH OF TRAVEL?

DO YOU SEE ANY PROBLEMS IN PICTURE (A) FOR PERSONS WITH DISABILITIES WHEN EVACUATING A TERMINAL?

ANY PROBLEMS WITH IN PICTURE (B)?



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### **SHELTERING IN PLACE**







### WHAT ARE SOME OF THE ISSUES YOU MAY ENCOUNTER WHEN ADDRESSING THE NEEDS OF PERSONS WITH DISABILITIES DURING PERIODS OF SHELTERING IN PLACE?

1	
2	_
3	
4	
5	
6	
7	
8	
9	
10	





Does your terminal have a SHELTER IN PLACE designated area?

Do you have a plan in place to address these issues?

How would you address the issues described in the previous page?

Is everyone in your organization familiar with the procedures?

How often do you review/update your emergency management procedures?

**NOTE:** YOU CAN NOT REQUIRE PERSONS WITH DISABILITIES TO GO TO A DESIGNATED AREA.





#### CONTROLLED EVACUATION LOCATIONS COULD INCLUDE---

	A	
	B	
	C	
The long	ger an evacuation lasts, the greater the needs that	will arise.
	A. HOT WEATHER (You need to consider)	
	1. Fans	
	2. Water	
	<ol><li>Check for stress on the body</li></ol>	
	4. Evacuation to Reliant (via ADA proce	dures)
	5	
	6	
	7	





#### B. COLD WEATHER (You need to consider)

1.	Heaters
2.	Blankets

- 3. Warm drinks
- 4. Evacuation to Reliant (via ADA procedures)

5. \_\_\_\_\_

6.\_\_\_\_\_

7.\_\_\_\_\_

8.\_\_\_\_

9.\_\_\_\_\_

10. \_\_\_\_\_

#### C. All extended evacuation periods

1. At the mustering site –

3

a) Seating

e)\_\_\_\_\_

b) Orange juice

f)\_\_\_\_\_

c) Accessible restrooms

g)\_\_\_\_\_

d) Portable generator

h)





#### THINGS TO LOOK FOR AT OFF AIRPORT EVACUATION SITES -

•	Ground	(grass,	dirt,	gravel	, etc.)
		(D. 0.00)	••••	D. a a.	,,

- Curb ramps
- Covering
- Communications to request resources
- Weather
- \_\_\_\_\_
- \_\_\_\_\_
- •





#### OTHER THINGS TO CONDER DURING EVACUATIONS & SHELTERING IN PLACE

Prescription Drugs
Medical devices needed for mobility
Hygiene products
Dietary Needs
Rx interaction with prolonged exposure to the sun
Location of disabled passengers
Manner of communicating with different disability types

#### **RESTROOMS**

Ensure that portable rest rooms have a minimum  $60" \times 60"$  turning radius, and hold bars are between 33-36" from the floor. Toilet seat covers and toilet paper dispenser are within required heights, and toilet height is between 17" - 19" high.

If washing stations are provided, they must be accessible to persons with disabilities. You may need to provide hand sanitizer to meet this requirement.





#### Types of Disabilities

There are many kinds of disabilities. They can be visible, hidden, permanent or occur only at certain times. Here are some types of disabilities:

- deaf-blind
- hearing
- intellectual
- developmental
- learning
- mental health
- physical
- speech or language
- vision





#### THINGS TO CONSIDER WHEN ADDRESSING THE NEEDS OF PERSONS WITH DISABILITIES

- Treat people with disabilities with respect and consideration.
- Patience, optimism, and a willingness to find a way to communicate are your best tools.
- Smile, relax, and keep in mind that people with disabilities want to experience helpful passenger service.
- Don't make assumptions about what type of disability or disabilities a person has.
- Some disabilities are not visible. Take the time to get to know your passengers' needs.
- Be patient. People with some kinds of disabilities may take a little longer to understand and respond.
- If you're not sure what to do, ask your passenger, "How May I help you?"
- If you can't understand what someone is saying, just politely ask again.





#### THINGS TO CONSIDER WHEN ADDRESSING THE NEEDS OF PERSONS WITH DISABILITIES

- Ask before you offer to help don't just jump in.

  Your passengers with disabilities know if they need help and how you can provide it.
- Find a good way to communicate. A good start is to listen carefully.
- Look at your passenger, but don't stare. Speak directly to a person with a disability, not to their interpreter or someone who is with them.
- Use plain language and speak in short sentences.
- Don't touch or address service animals they are working and have to pay attention at all times.
- Ask permission before touching a wheelchair or a piece of equipment.
- Every airline and tenant should have emergency procedures for passengers with disabilities. Make sure you know what they are.





#### **Deaf-Blind Disabilities**

A person who is deaf-blind cannot see or hear to some extent. This results in greater difficulties in accessing information and managing daily activities. Most people who are deaf-blind will be accompanied by an assistant, a professional who helps with communicating. Assistants are trained in special sign language that involves touching the hands of the client in a two-hand, manual alphabet or finger spelling, and may guide and interpret for their client.

- Don't assume what a person can or cannot do. Some people who are deaf-blind have some sight or hearing, while others have neither.
- Don't touch or address service animals they are working and have to pay attention at all times.
- Never touch a person who is deaf-blind suddenly or without permission unless it's an emergency.





#### **Hearing Impairments**

People who have hearing loss may be deaf or hard of hearing. Like other disabilities, hearing loss has a wide variety of degrees. People who are hearing impaired may require assistive devices when communicating.

- Always ask how you can help. Don't shout.
- Attract the passenger's attention before speaking. The best way is a gentle touch on the shoulder or gently waving your hand.
- Make sure you are in a well-lighted area where your passenger can see your face.
- Look at and speak directly to your passenger. Address your passenger, not their interpreter.
- If necessary, ask if another method of communicating would be easier, for example a pen and paper.
- Don't put your hands in front of your face when speaking.



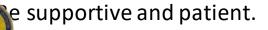


Intellectual or Developmental Disabilities

People with intellectual or developmental disabilities may have difficulty doing many things most of us take for granted. These disabilities can mildly or profoundly limit one's ability to learn. You may not be able to know that someone has this disability unless you are told, or you notice the way people act, ask questions or use body language.

Passengers with an intellectual or developmental disability may understand more than you think. They will appreciate the respect and consideration that you show them.

- Don't assume what a person can or cannot do.
- Use plain language and speak in short sentences.
- Make sure your passenger understands what you've said.
- If you can't understand what's being said, don't pretend. Just ask again.
- Provide one piece of information at a time.

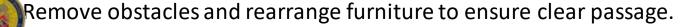




#### **Physical Disabilities**

There are many types and degrees of physical disabilities, and not all require a wheelchair. People who have arthritis, heart or lung conditions or amputations may also have difficulty with moving, standing or sitting. It may be difficult to identify a person with a physical disability.

- Speak normally and directly to your passenger. Don't speak to someone who is with them.
- People with physical disabilities often have their own ways of doing things. Ask before you help.
- Be patient. Passengers will identify their needs to you.
- Don't touch assistive devices, including wheelchairs, unnecessarily unless it's an emergency.
- Provide your passenger information about accessible features of the immediate environment (automatic doors, accessible washrooms, etc.).





#### Blindness or have Visual Impairments

- There is a difference between visual impairment and blindness. Some people who are "legally blind" have some sight, while others are totally blind.
- Announce your presence, speak out, and then enter the area.
- Speak naturally and directly to the individual.
- Do not shout.
- Don't be afraid to use words like "see," "look," or "blind."
- State the nature of the emergency and offer them your arm. As you walk, advise them of any obstacles.
- Offer assistance but let the person explain what help is needed.
- Do not grab or attempt to guide them without first asking them.





#### **Seniors**

- Always ask the person how you can best assist them.
- Some elderly persons may respond more slowly to a crisis and may not fully understand the extent of the emergency. Repeat questions and answers if necessary.
- Be patient! Taking time to listen carefully or to explain again may take less time than dealing with a confused person who may be less willing to cooperate.
- Reassure the person that they will receive medical assistance without fear of being placed in a nursing home.
- Older people may fear being removed from their homes be sympathetic and understanding and explain that this relocation is temporary.
- Before moving an elderly person, assess their ability to see and hear; adapt rescue techniques for sensory impairments.



#### People with Mental Illness

- You may not be able to tell if a person is mentally ill until you have begun the evacuation procedure.
- If a person begins to exhibit unusual behavior, ask if they have any mental health issues of which you need to be aware. However, be aware that they may or may not tell you.
- In an emergency, the person may become confused. Speak slowly and in a normal, calm speaking tone.
- If the person becomes agitated, help them find a quiet corner away from the confusion.
- Keep your communication simple, clear and brief.
- If they are confused, don't give multiple commands ask or state one thing at a time.







#### **COMMUNICATING EFFECTIVELY**

COMMUNICATING EFFECTIVELY WITH PERSONS WHOSE DISABILITIES DIRECTLY AFFECT SPEECH, HEARING, OR SIGHT ARE MORE LIKELY TO HAVE COMMUNICATION DIFFICULTIES.

UNLESS A COMMUNICATION BARRIER IS
OBVIOUS, IT IS BEST NOT TO ASSUME ONE
EXISITS UNLESS THE INDIVIDUAL, A FAMILY
MEMBER, OR OTHER CAREGIVER TELLS
YOU ABOUT THE BARRIER.





When a person with a disability does have difficulty with communication, it may be helpful to keep the following in mind:



- Allow additional time to exchange information
- Talking with someone with a mild communication difficulty is very different than talking with a person with a moderate or severe communication difficulty.
- Many people have stronger receptive (understanding) communication skills than expressive skills.
- Conversely, a person's expressive speech may sometimes give an impression of better comprehension than is actually the case, so check the individuals understanding.
- Some people may be delayed in responding to questions; so much so that answers may seem to "come out of nowhere."



• Some people with severe disabilities may also have difficulty giving you an accurate picture of their feelings and symptoms because of limitations in interpreting internal cues (e.g., need to urinate, anxiety). Involving caregivers who know the individual well may help you to better understand his/her experiences. However, as much as possible, continue to focus your communication efforts on the individual.

#### SUGGESTED COMMUNICATION TIPS

- Determine how the individual communicates: "How do you say Yes? No? "Do you use a device? Can you show me how to use this book/machine?"
- Show warmth and a positive regard.
- For individuals with autism and related disorders, respect the preference to avoid eye contact.
- Use positive comments and positive reinforcement.
- Focus on the individuals abilities rather than disabilities.







HOW WOULD YOU COMMUNICATE IF YOU ENCOUNTER A DISABLED PASSENGER WHO DOES NOT UNDERSTAND ENGLISH AND IS FOREIGN SPEAKING?





# **Emergency Evacuation Aid**













Evacuation

Active Shooter

Bomb

Evacuation Assembly











Earthquake



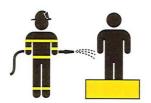
Electric Shock







Biohazard



Decontamination



Flood



Civil Disobedience

Los Angeles World Airport Police





#### **Emergency Evacuation Aid**



Write a	message	to	a	community	member	bel	ow:

You need to EVACUATE now.

Do you have any Service/Animals?

Do you have a mobility Issue?

You should leave with me.
Do you have MEDICATION?
Are you traveling alone?

Leave the area now.

Are you here alone?

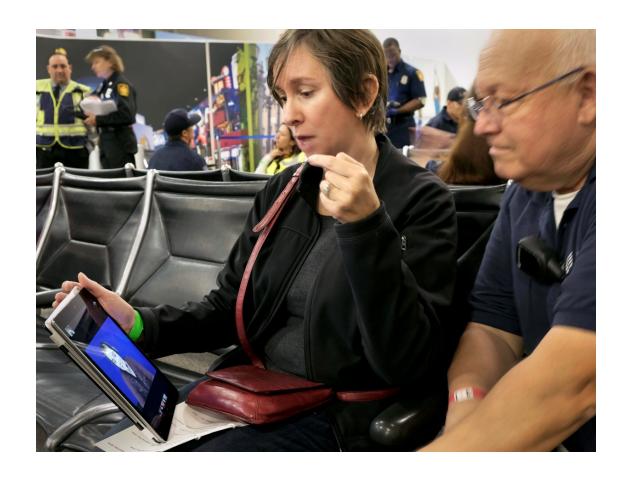
Follow that person.

Los Angeles World Airport Police

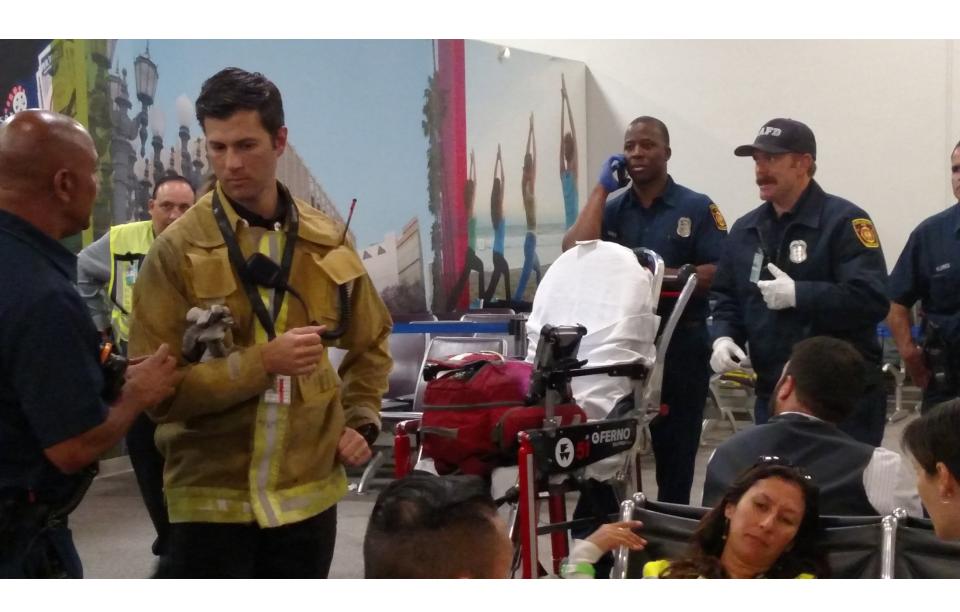






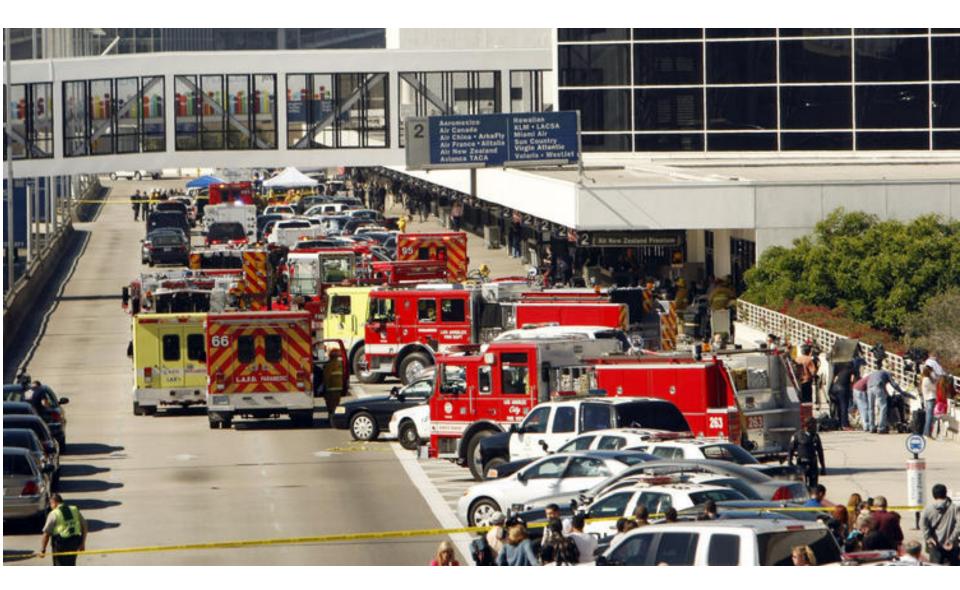




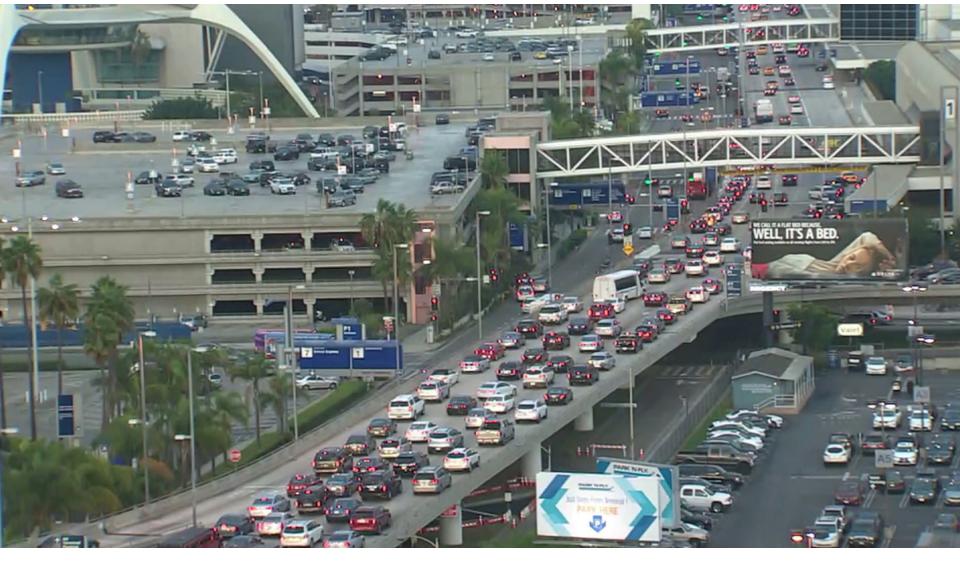




Coordinator
L.A. WORLD AIRPORTS









# **3 STEPS TO SURVIVING INFESTATI**

**1. Avoidance 2. Termination** 

**3. Disposal** 

All zombie infestations render the location uninhabitable. The citizen's first duty is to vacate the area and proceed immediately to an authorized Rescue Station. Duly authorized Z.E.R.O. personnel will manage relocation -- but, the key to an effective evacuation is COMPLETE AVOIDANCE OF HAZARDOUS CONDITIONS while en route.

#### EVACUATE



Gather family and essential small valuables Proceed immediately to the Rescue Station only. DO NOT attempt to secure or defend assigned to your area. In the absence of Z.E.R.O. Relocation Management personnel property or posessions. monitor local radio broadcasts for directions.

#### **DO NOT ENGAGE!**

Is is critical to remember that any zombies encountered during relocation are NOT family or friends but REANIMATED CORPSES INFECTED WITH A DEADLY CONTAGION. Under NO circumstances should you engage one in any kind of interaction. Contagion is transmitted via a bite, and ANY interaction with a zombie results in repeated attempts to bite.



#### IN THE EVENT OF A BITE...

Apply pressure to the wound with padding found in the supplied BITE KIT until proper medical supervision can be accessed.

IF THE WOUNDED INDIVIDUAL EXPIRES after being bitten. VACATE THE PREMISES IMMEDIATELY or execute guidelines found in next section.



**J** 

Engage this step only if in an unsecured location, and ONLY if you have positively identified a zombie by using the Zombie Classification Cards (supplied). Otherwise, any terminations should be referred to and executed by a duly authorized member of Z.E.R.O. or your local licensed Zombie Exterminator.



#### or decapitation (D). CENTER MASS

For stopping or slowing down target ONLY when distance does not permit a head shot. NOT an effective termination method.

#### LOWER EXTREMITIES

For stopping or slowing down target ONLY when distance does not permit a head shot. NOT an effective termination method.



#### "TAPE & TAG"

After terminating the zombie(s), mark the perimeter to enable Z.E.R.O. Disposal Unit personnel to locate the remains and ship to a Mobile Acid Disintegration (M.A.D.) unit for disintegration. This can be completed in two simple "Tape & Tag" steps:

- 1. Mark area surrounding the remains with an appopriate length of CAUTION: ZOMBIE OUTBREAK ZONE tape (supplied).
- 2. Attach a FORM 2BD tag (supplied) to the toe of the corpse.

#### **DO NOT INCINERATE!**

Incineration releases airborne toxins which spread infection to the uninterred deceased or, in areas of heavy humidity or precipitation, the recently interred deceased. This exponentially increases infestation levels.



Courtesy: Zombie Emergency Response Operations: Information Branch

FORM #078-INFO-998033-2A (rev. 11.09.04)



WHAT IS YOUR ORGANIZATION'S POLICY FOR ASSISTING PASSENGERS WITH DISABILITIES UNDER THESE CIRCUMSTANCES?

DO YOU EXERCISE THESE POLICY PROCEDURES?

DOES EVERYONE IN YOUR ORGANIZATION KNOW THESE PROCEDURES?

**HOW ABOUT YOUR CONTRACTORS?** 









# WHAT ARE SOME OF THE BARRIERS TO TERMINAL EVACUATION FOR PEOPLE WITH DISABILITIES?

No ability to go down stairs

Not being able to hear instructions or receive notice to evacuate

Confusion

Disaster debris blocking accessible route

Inadequate directional signage for people with vision loss

Exit not accessible because of screening equipment

**Smoke** 



# WHAT ARE SOME OF THE DISABILITIES YOU MAY ENCOUNTER DURING A DISASTER IN AN AIRPORT ENVIRONMENT?

DISABILITY								
WHAT ARE SOME OF THE ISSUES YOU MAY EXPECT TO ENCOUNTER WITH PEOPLE HAVING THIS DISABILITY?	HOW WOULD YOU ADDRESS THOSE NEEDS?							









# Things to consider about persons with vision loss:

For people with sight, the sense of vision is the primary means for assessing and interpreting clues in the external environment. As images are transferred to the brain, we reach both physically and emotionally to what we see. Without sight, secondary senses evolve into the medium for assessing the external environment. Those who have been blind or visually impaired for several years generally learn to adapt and hone their remaining senses to allow for largely independent living in a society that sees.

During an emergency, the senses on which visually impaired or blind individuals depend may be overwhelmed.

High-decibel smoke alarms make it difficult for the blind individual to process audible clues and instructions effectively.

Many buildings are not equipped with Braille or tactile signage for the visually impaired, hindering the individual's ability to escape be cause of lack of directions.

As they may not be able to process visual indicators of fire, individuals with visual impairments are at tan increased risk for accidents involving fires and burn injuries.

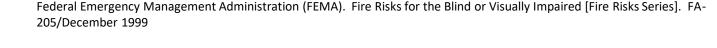
# Things to consider about persons with vision loss (continued):

Continuous high-decibel smoke alarms may inhibit the blind person's ability to hear and process auditory clues from rescue personnel, neighbors, or others close by.

Individuals who have lost their sight only recently may be unaccustomed to relying primarily on their sense of hearing.

Complications arise when blind or visually impaired individuals are in a foreign environment such as an airport terminal. Tactile or high-contrast markings designating exits are not always available. Inability to locate an escape route can waste the few precious minutes before smoke and toxic fumes will overcome an individual.

Let the person know what is happening.





# **People with Blindness and Vision Loss:**

Most people who are legally blind have limited vision.

Announce your presence

Do not shout. A person who is blind is likely not deaf too.

Offer assistance, but let the person explain how you can best help them. DON'T ASSUME you know best.

State the nature of the emergency and offer the individual your arm. As you walk, advise them of any obstacles in front of them. (If no service animal is with the individual).

If the individual has a service animal, ask the individual if the service animal should guide him as they follow you?

When you have reached safety orient the person to the location and ask if any further assistance is needed.



#### Things to keep in mind regarding Service Animals:

Service animals are not pets. Consider a service animal as an extension of the person you are assisting.

If possible, allow the service animal lead the individual out of danger while following your lead.

Service animals are NOT pets and must be evacuated with the person.

If the person is transported to a medical facility, transport the animal with the person if possible. Otherwise arrange for the service animal to go to the medical facility where the person was transported to.

Never send a service animal to an animal shelter (dog pound).

If the person expires at the scene, ask LAXPD to take custody of the service animal. LAWA has protocols for sheltering of service animals in emergency situations. You may also contact LAWA's ADA Office via the ARCC.





# **HEARING LOSS AND DEAFNESS**



# Things to consider about persons with Hearing Loss and Deafness:

A portion of the deaf and hard of hearing population is also blind or visually impaired.

Not everyone who is deaf understands sign language.

Not everyone who is deaf can lip read.

Many people with hearing impairments rely on visual cues such and hands or lips. In the event of a fire, a person's line of sight may be hampered by smoke, making it difficult or impossible to see to read a person's lips or hands.

Instructions from firefights may be obscured, which may interfere with rescue attempts.

Fire fighters may be wearing breathing apparatus that cover their faces, making lip reading impossible. The same may hold true for an individual who is not entirely deaf but does not use a hearing aid or has temporarily removed it.



# Things to consider about persons with Hearing Loss and Deafness (continued):

In the often chaotic environment of a fire, voices and sounds tend to be muffled, further contributing to failure to recognize instructions and to escape in time.

In a terminal emergency a deaf person may not be aware of announcements warning people to evacuate or of visual paging telling people to leave the building.

When approaching someone who is deaf, DO NOT shout (it does not work).

Use visual means to communicate such as:

- Pen and paper
- Pictograms
- Gestures

In the event you are in a dark place, have a flashlight available to aid in communications.

Let the person know what is happening.





#### Things to consider about persons with Mobility issues:

Not all persons with mobility problems use wheelchairs. Some may use, scooters, Segways, crutches, walkers or other devices.

If a person requires a device to get from one location to another, it is important that the device be evacuated with the individual or transported to the individuals location.

Consider a wheelchair as an extension of the person, such as their legs would be for you. Treat the wheelchair in a manner that will minimize the risk of damage when evacuating it.

Ask the individual what kind of assistance they require to evacuate the area?

Ask for the best way to assist them. Never assume you know best.

Never physically lift an individual unless the situation involves life and death or there is no other way to get the person out of an impacted area.

Find out if the disability is such that special precautions need to be taken.



# Things to consider about persons with Mobility issues (continued):

If you use an evacuation chair to get a wheelchair user down from a higher floor, make certain you have been trained in the use of the evacuation chair.

If the person has a service animal, ask if the animal should lead or how best to ensure the animal will not be stressed out if it is not performing its job in assisting the person.

Some people travel with their electric wheelchairs. It is possible you will encounter someone whose wheelchair has run out of power.

Mobility impairments may restrict the individual's ability to take swift action when faced with an emergency situation.





# SENIOR CITIZENS



#### Things to consider about Senior Citizens:

Older adults are more likely than their younger counterparts to suffer from reduced sensory abilities such as smell, touch, vision, and hearing, and from diminished mental faculties such as dementia, Alzheimer's disease, and depression. Such impairments tend to reduce older adults' reaction times and place them at a higher risk for causing fires, and thus at a higher risk of fire death and fire injury.

Baby boomer, the 77 million people born between 1946 and 1964 constitute 30% of the entire U. S. population.

The average age of baby boomers is 57 years of age, and will enter their mid-60s between 2010 and 2030.

#### **Global Increases and Trends**

Internationally, senior populations are increasing at an even faster rate than in the United States. The population of people 65 years and older increases worldwide by 795,000 every month, with the largest increases occurring in developing countries such as Singapore, Malaysia, Colombia, Costa Rica, and the Philippines.

NOTE: Air travel from Asia is expected to grow for the foreseeable future.



#### Things to consider about Senior Citizens:

As people age, they undergo physical and cognitive changes that can impair their abilities to prevent

or respond to fires and situations in which fire is likely. In addition, many older adults suffer mobility impairments (disabilities), which make their ability to successfully escape fires and other life threatening events more difficult.

Some substance-induced impairments, such as those caused by alcohol consumption or the side effects of prescription medication, can result in a wide range of impairments that increase older adults' risks of fatality and injury.

Someone could have poor vision, poor hearing, and be prescribed impairing medications - all at the same time.



#### Things to consider about Senior Citizens:

#### Sensory and Cognitive Impairments in Older Adults

Sensory changes, such as an impaired sense of smell, touch, sight, or hearing, can increase the risks to older adults. When several senses are weakened in a person, the risk to an individual is compounded.

Cognitive changes, or changes in mental functioning, constitute additional risk factors.

A decrease in mental cognition can often be worse than a decrease in physical adeptness. Individuals who suffer from reduced mental faculties often do not realize they are in any danger and can sometimes even engage in risky behavior.

Many older adults experience a decreased sense of touch, a problem that manifests itself in several forms. Individuals with a weakened or decreased sense of touch are more likely to have difficulty performing daily tasks such as unplugging electrical cords.

Touch problems associated with aging, thinning skin can lead to a higher risk for burn injuries and increase the severity of burn injuries.

#### **VISION**

With 18 percent of older Americans currently suffering from eye impairments, vision loss is one of the more severe casualty risk factors among older adults.

Older adults with diminished sight are more likely to stumble and fall when in a hurry, impeding their ability to escape a fire or other danger.

The most typical changes to the eye caused by aging are loss of focus, declining color sensitivity, and a need for more light.

Presbyopia, the inability to focus on close objects as a result of age-related changes to the eye and lens, is often solved by simply wearing glasses. But there may be a limit to vision correction from glasses alone.



#### **HEARING**

The ability to hear the blare of a smoke alarm and other warning sounds of fire is something many people with excellent hearing take for granted. For the approximately one–third of older Americans who have hearing impairments, the inability to hear such vital warnings represents a substantial fire risk factor.

Hearing impairments afflict 37 percent of all Americans 65 years and older. This percentage increases with age: hearing problems were reported in 30 percent of adults aged 65 to 74; 42 percent in adults aged 75 to 84; and 60 percent in those aged 85 and over. Hearing loss affects more men than women.



#### MEMORY IMPAIRMENTS, DEMENTIA, AND ALZHEIMER'S DISEASE

Among the older population, 15 percent of men and 11 percent of women suffered from some form of moderate to severe memory impairment in 2002.

Nationally, 4.5 million people are inflicted with Alzheimer's disease. According to the Alzheimer's Association, one in ten people 65 years and older have the disease. In the oldest age group, those 85 years and over, almost half are affected by Alzheimer's.

The association estimates that 16 million Americans will have the disease by the year 2050 if no cure is found. The average life expectancy after an Alzheimer's diagnosis is 8 years.

Because memory impairments directly affect reasoning and basic memory, they are substantial fire risk factors for older adults. With dementia and Alzheimer's disease, such mental impairments make out-of-the-ordinary behaviors possible, including dangerous actions and fire-risky behaviors. Accidents, falls, and contact with dangerous substances are more prevalent among dementia patients, and for such patients, living quarters should be modified to remove anything within reach that could pose a potential fire risk.

#### **DEPRESSION**

Depression, which affects about 18 percent of older women and 11 percent of older men, poses a more complex risk. The wide-ranging effects of depression make it more difficult to analyze in relation to fire and other risks.

Common symptoms of depression that could impact that risk include fatigue or loss of energy, recurrent thoughts of fatality or suicide, difficulty paying attention or making decisions, and confusion and avoidance.

According to the National Health and Retirement Survey, older women are more likely to experience depression than older men, and the propensity for depression in both men and women increases with age. Among people 85 years and older, 20 percent experienced signs of depression, compared with an average of 13 percent of people between the ages of 65 and 69 who experienced the same signs.



#### **Disabilities and Mobility Impairments**

As many as half of the older population, suffer from some form of disability or Mobility impairment. Thus, the ability of older adults to react to situations, respond to fires and other hazards, and escape burning structures is hampered when their movement is slowed or impaired.

#### **Alcohol and Prescription Drugs**

Prescription drugs and alcoholic beverages, alone and especially when combined, Are a risk factor similar to cognitive impairments. The decreased alertness and impaired mental lucidity associated with prescription drugs, alcohol, and the combination of both are clear fire risks.



### Things to consider about Senior Citizens (continued):

**Remember:** Some elderly persons may respond more slowly to a crisis and may not fully understand the extent of the emergency. Repeat questions and answers if necessary. **BE PATIENT.** 

Taking time to listen carefully or to explain again may take less time than dealing with a Confused person who may be less willing to cooperate.

Before moving an elderly person, assess their ability to see and hear; adapt rescue techniques for sensory impairments.

Persons with a hearing loss may appear disoriented and confused when all that is really "wrong" is that they can't hear you.

If the person has a vision loss, identify yourself and explain why you are there. Let the person hold your arm and then guide them to safety.



### Other Disability Populations:

Persons with cognitive disabilities

Hidden disabilities

Mental illness

## **General Reminder:**

Don't forget to ask if the person you are helping has left items they need for day to day functioning or activities.

Some people with disabilities also mobility aids such as wheelchairs, crutches, walkers, medical oxygen, dialysis machines, medicines and other items that they need.





# HOW WOULD YOU HANDLE THESE EMERGENCY SITUATIONS



A DEAF INDIVIDUAL IS WEARING A MEDICAL ALERT BRACELET WITH THE SYMBOL SHOWN BELOW.

WHAT IS THE PERSON TRYING TO COMMUNICATE TO PEOPLE?









AN INDIVIDUAL WHO IS DEAF HAS A MEDICAL ALERT BRACELET STATING HE IS ON BLOOD THINNERS.

AS A RESULT OF THE AIRPLANE
ACCIDENT THE INDIVIDUAL HAS A
MINOR WOUND WITH A PENCIL
IMPALED IN HIS RIGHT LEG.

HOW WOULD YOU ADDRESS HIS MEDICAL NEEDS?

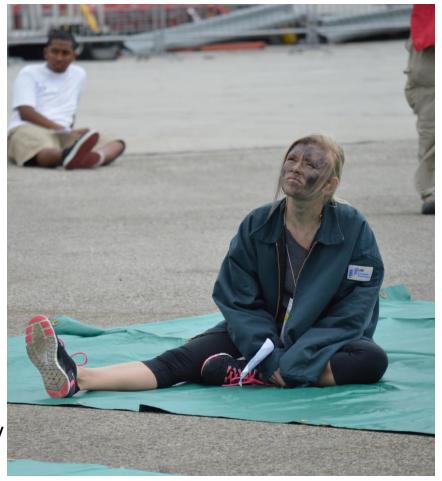




A Russian speaker cannot speak or understand English. Had severe burns to face, including blackened face as a result of the fire.

After a while she approaches fire personnel trying to communicate that she feels ill and lightheaded. She is sent back to wait.

After additional waiting and getting sicker she once again goes to fire personnel and attempts to signal her condition. She is once again sent back, but faints on her way back.







# CONCERNS EXPRESSED ABOUT FIRST RESPONDERS FROM MEMBERS OF THE DISABILITY COMMUNITY



The majority of comments received from participants involved first responders inability to effectively communicate with them. Persons who are deaf, with hearing difficulty, and foreign language speakers had similar complaints.

Typical comments by deaf, hard of hearing, and foreign language speakers included:

Fire fighters frustration in not being able to communicate with victims.

Some fire fighters managed to use finger spelling, pen and paper or gestures effectively as forms of communication. Most fire fighters however, moved on when they realized it would take effort to communicate with a person they could not converse with by voice.

"One fire fighter came up and asked me if I knew lip reading. I do a little bit but could not "hear" or understand his commands as he kept turning his head as he talked with me. He was talking with others while talking with me. He too got frustrated that I couldn't hear his commands."



Sterotypical assumptions about people who appear "normal".

One fire fighter was yelling at deaf victim. Attempting to have him hear.

"One fire fighter came up to me and started yelling at me trying to get me to answer their questions. I could not hear them. It really frustrated them. (Yelling at a deaf guy does not work)"



Closer attention needs to be given to Medical Alert bracelets and common means used to alert first responders about hidden medical issues.

First responders need to pay closer attention to Medical Alert There may be crucial information about medicines or medical condition that may impact treatment.



One victim said, "when the fire department came to me, I showed them my BIO Hazard logo (fake tattoo). The fire fighter who was attending to me was confused and appeared puzzled. It became apparent that the fire fighter did not understand the meaning of the BIO Hazard symbol, and a connection was never made. I had blood coming out of the side of my mouth and side of my cheek. The blood was a safety issue that could seriously impact the first responder.

If a victim has an obvious disability, the first responder should inquire about medical issues or medicines the person is taking, and note the information accordingly.

If a person is known to have a disability or is suspected of having a disability such as deafness or vision issues, a special visible identifier sticker should be placed on the triage card or in a conspicuous part of the clothing. This would alert other aid providers to make VRI or other resource(s) available at the triage or waiting area.



At a secondary location personnel should inquire about special equipment the victim needs that was lost in the aircraft or abandoned in the terminal.

This would include inquiries about wheelchairs, walkers, medicines, service animals, canes, medical oxygen, dialyses equipment, or other device needed by the traveler.



