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GOVERNERSHIP OF ISTANBUL

AFAD®



Disaster and Emergency Planning Guide for People with Disabilities

Istanbul Seismic Risk
Mitigation and Emergency
Preparedness Project
(ISMEP)



Disaster and Emergency Planning Guide for People with Disabilities

Consultant

Prof. Dr. Onur Kurt

Prepared by

Zuhal Nakay

Project Team

Nazan Demir

İsmail Ozan Çılğın

Meral Morgül

Editorial Staff

Editorial Director: Gülçin İpek (Turkish edition)

Graphic Application: Resul Atabay (Turkish edition), Tuğçe Çelikşen Demirkaya

Illustration: Muhammet İbrahim Güzelsoy

Project Management

Istanbul Project Coordination Unit (IPCU), Governorship of Istanbul, Türkiye

K.Gökhan Elgin

Yalçın Kaya

Levent Gerdan

Aslıhan Al

Gözde Pehlivan Türk Koytak

Project Coordinator and Consultancy Service

Diyalog360, Turkuaz, Eduser, Bilinçli Yaşam Ortaklığı

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In 2020, “Disaster Preparedness Training Materials for Society” were rewritten under the “Society Training Modules” in line with the developing technologies, new approaches of learning, having regard to the changing conditions, regulations and laws, theories and experiences worldwide

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Abbreviations

AFAD	Disaster and Emergency Management Presidency
AFEM	European Natural Disasters Training Centre
AMP	Emergency Response Plan
ASD	Autism Spectrum Disorder
EUR-OPA	European and Mediterranean Major Hazards Agreement
IAADM	Provincial Disaster and Emergency Directorate
IAADMY	Provincial Disaster and Emergency Management Centre
ISKG	Occupational Health and Safety Law
KBRN	Chemical, Biological, Radiological, Nuclear
NGO	Non-Governmental Organization
PTSD	Posttraumatic Stress Disorder
TAMP	Turkish Disaster Response Plan

How to Use This Guide?

Disaster and emergency planning is consisted of four basic stages: Mitigation, Preparedness, Response and Recovery. The stages of mitigation and preparedness take place before the disaster and emergency, response stage during the disaster and emergency and, finally, recovery stage after the disaster and emergency. In the framework of these four stages, the following six steps are recommended in the disaster and emergency planning for people with disabilities.

- 1. Risk Assessment and Mitigation**
- 2. Making Disaster and Emergency Plan**
- 3. Planning Disaster and Emergency Evacuation**
- 4. Disaster and Emergency Drills**
- 5. Things to Be Done during/after Disaster and Emergency**
- 6. Recovery Phase after Disaster and Emergency**

Steps to be taken in the preparedness stage before disaster and emergency are of key importance for a successful response during disaster and emergency and for a successful recovery process after it. Hence Evacuation Planning, Drills and Things to Be Done during/after Disaster and Emergency addressing to different types and requirements of disabilities are collected under separate headings.

Checklists are made available at the end of the chapters to brush up the information already given about the matter in question. Some information is particularly repeated in the chapters about different types of disabilities in order that a reader with intention to get information only about his or her type of disability does not miss any important details.

Dealing with these headings for example in the scope of first-aid trainings and making them widespread not only at a local scale, but also at a regional and national scale, will make it possible that the information they contain are accessible to much more people.

Introduction

In the current century, while tremendous advancements occur in terms of technology, science and culture that facilitate human life in a great number of ways, we also encounter the greenhouse effect triggered by such advancements and consequently natural, technological and human-made disasters at an increasing rate. And while the developed countries of the world rather benefit from the positive innovations, their negative results affect our planet entirely. However, people with disabilities may suffer much more from the disasters and emergencies. Although people with disabilities and their close relatives are more disadvantageous in access to any technological and social innovation due to various social and physical hindrances, they also constitute a section of the community that experience greater challenges because of their disabilities and should be prepared more specially in the case of all natural and human-made disasters, especially for earthquake and flood.

Major disaster risks in Türkiye include earthquake, heavy rainfall and flood, drought, landslide, rock fall, wildfire, industrial accidents and fires, wind and blizzard, avalanche, heat wave, fog, traffic accidents and terror attacks. **Earthquake** is the major type of disaster for Türkiye in terms of the destruction it leads to. While 92% of the national territory takes place in the seismic zone, about 95% of the country population lives under the threat of earthquake (Ministry of Environment and Urbanization, 2014).

The effects of disasters and emergencies or hazardous events both vary depending on the country and region and distribute more disproportionately according to the regional characteristics or social groups. That some regions or social groups suffer more in the face of a disaster or hazardous event indicates that such region or group has higher vulnerability. People with disabilities, women, children and elderly are considered as highly vulnerable groups in case of disasters and emergencies.

According to research results, people with disabilities that experience a disaster or emergency are subject to much higher rate of deaths, possibility of injuries, medical-related complications, failure to get support from search and rescue teams or volunteers and, as a result, a longer stage of recovery. And it is also observed that before disasters people with disabilities suffer more from poverty, unemployment, harsher living conditions in risky settlements and have more restricted access to healthcare services (Stough, Kelman 2018).

These findings clearly show the need of studies about people with disabilities in the field of disaster and emergency. Besides, knowledge about people with disabilities on part of those persons and organizations who take place in the disaster and emergency management system is also important for the achievement of the system.

All definitions of types of disabilities used in this Guide have been made according to the official resources, in cooperation with specialists and by asking the opinion of related associations.

Why Is Disaster and Emergency Planning Important for People with Disabilities?

Disaster and emergency planning is part of the disaster management. The concept of disaster management means prevention of negative events that may arise as a result of disasters or mitigation of damages thereof. Although an extensive and integrated disaster management that takes all hazards into consideration is still a new approach, it has gained importance in the current disaster and emergency studies.

According to this approach, planning, orientation, supporting, coordination and effective and efficient implementation of preparedness prior to the disaster, response during the disaster and recovery after the disaster require action of all organizations and individuals of the community in line with these common goals. It is, therefore, of vital importance that all individuals should be well aware of what they should do before, during and after the disaster and emergency and prepare personal plans for mitigation of loss in case of disaster and emergency. In this context, a disaster and emergency plan is consisted of three stages, e.g. preparedness which involves risk assessment and mitigation before the event, response during the event and recovery after the event.

A great majority of the steps that should be taken by the individuals with respect to disaster and emergency consisted of measures that should be taken before the said circumstances. Taking these measures properly will ensure avoidance of many negative things in case of disaster and emergency, providing maximum safety of life and property for the people.

Although each stage of mitigation, preparedness, response and recovery is significant on its own, a successful **evacuation** at time of disaster or emergency constitutes one of the most vital matters for people with disabilities. When evacuation is carried out under dramatic and hard conditions even for people without any disabilities, the main problem for people with disabilities is including them in this process. While it is sufficient for people without any disability to know **where** the emergency exits and areas of refuge are in the building, it is particularly important for people with disabilities to know **how** and **with which equipment** they will get to these emergency exits.

Particularly after the 1999 Marmara Earthquake, interest in the emergency evacuation planning has increased to a great extent. The experience has shown that planning is a must for a successful evacuation and it should definitely involve individuals from the disadvantaged sections of the community as well. In case of disaster and emergency, people should be quickly evacuated from the buildings, vehicles or open areas and, in this context, **emergency evacuation** considerably increases the chance of a successful evacuation. However, many people, employers and facility managers have no evacuation plans. Ability or failure to make a plan for and meet needs of the people with disabilities may determine the difference between survival and non-survival in an emergency.

The level of support that people with disabilities may require in case of disaster and emergency varies depending on type and degree of the disability. Some individuals are able to make all preparedness independently prior to disaster and emergency, protect themselves during these events and adapt themselves to the extraordinary conditions afterwards. However, some individuals with disabilities may need support of other people during all these stages.

According to the World Health Organization, there are about one billion individuals with disabilities worldwide.

It is known that many people with disabilities have failed to escape and drowned during the tsunami that occurred in the Indian Ocean after the earthquake in 2004. It has also been reported that only 41 of 102 people with disabilities in a nursing home in Sri Lanka could survive during the tsunami. Basing on these examples, the societies should gain awareness of the difficulties encountered by the people with disabilities during disaster and emergency cases and, in turn, reflect such awareness on the preparedness plans for disaster and emergency (Kurt, 2019).

Even if search and rescue teams and other officials arrive at the scene immediately after disasters and emergencies, it is not always possible to ensure that these teams catch up with all affected individuals at the same time. This fact necessitates disabled people to take an active role in the planning of their own safety.

Provided they have not any special case preventing them (e.g. heavy mental disability), it is still these individuals themselves who are most expected to have knowledge about their own capacity and capabilities as well as their requirements and services after disaster and emergencies (Kurt, 2019).

It is therefore important, that the people with disabilities should create a common preparedness plan for coping with disaster and emergency in cooperation with their families, relatives and other individuals who deal with their care, if any.

The main objective of *Disaster and Emergency Planning Guide for People with Disabilities*, prepared basing on the said approach, is to inform and guide different groups of people with disabilities, with whom they are in close relationship (family, caretakers, friends, employees, etc.) and related organization about what they can do before, during and after disasters.

Current Status Related to People with Disabilities

I. Statistics

Official records on people with disabilities in Türkiye are kept by the General Directorate of Services for People with Disabilities and Elderly under the Ministry of Family and Social Services, and are available via National Database of People with Disabilities. As of December 2019, the number of the people with disabilities alive and registered within the National Database of People with Disabilities is 2,515,767, of which 1,419,961 are male (56%) and 1,095,806 are female (44%). People with disabilities due to temporary medical problems are not included in this number. National Database of People with Disabilities also do not contain individuals who did not apply the hospitals to obtain Medical Report on Disability and did not come into contact with the government.

Types of disabilities are classified by the National Database of People with Disabilities as follows:

People with Visual Impairments/ Hearing Impairments/ Speech Impairments

People with Orthopaedic Impairments/ Mental Impairments / Psychological and Emotional Disability

Persons with Chronic Diseases / Other

Dispersion of people with disabilities registered and alive in the National Database by type of disability:

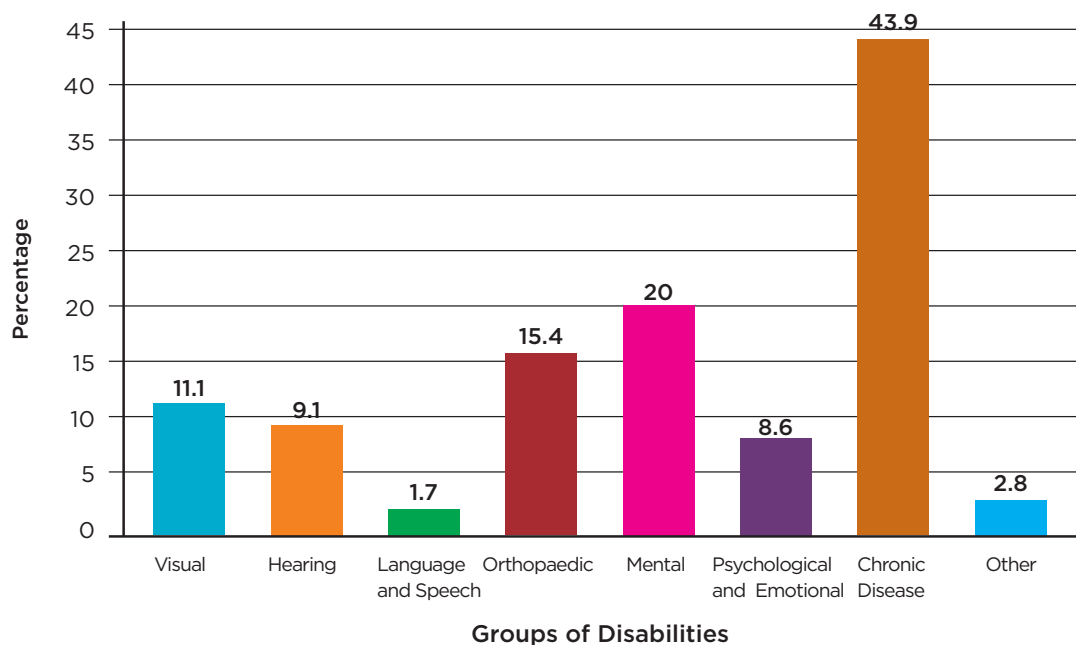


Table 1: Dispersion of people with disabilities registered and alive in the National Database by type of disability. (Source: <https://www.aile.gov.tr/media/42250/istatistik-bulteni-2020-mart.pdf>)

Dispersion of people with disabilities registered and alive in the National Database by age and sex:

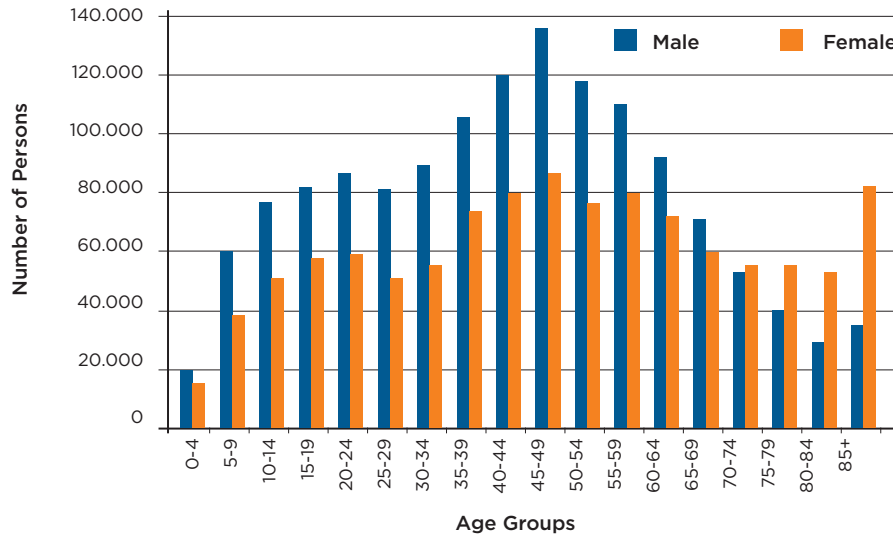


Table 2: Dispersion of people with disabilities registered and alive in the National Database by age and sex. (Source: <https://www.aile.gov.tr/media/42250/istatistik-bulteni-2020-mart.pdf>)

"Population and Housing Research for 2011" is the latest extensive sampling study of people with disabilities in Türkiye, conducted by the Turkish Statistical Institute (TSI) in 2011. In the said study, disability is defined as difficulty in vision, hearing, speaking; learning/doing simple four operations compared to peers; remembering/concentration and mobility (walking, carrying, holding and going up and down stairs). Within the research has included those individuals, who stated that they had difficulty with or could not perform at all minimum one of the fields mentioned above in the population of people having at least one disability.

"Population and Housing Research, 2011 (Disability)"

The population ratio of people with minimum one disability (3 years old and above) is 6.9%.

While this rate for men is 5.9%, it is for women 7.9%.

The population ratio of people with minimum one disability tends to increase in proportion to the increase of the age group.

In the age group 35-39, the ratio of female persons with minimum one disability is higher than male persons.

As the study did not include individuals with chronic diseases, it would not be wrong to say that the number of disabled people in our country would be much higher if other individuals with special needs due to chronic or temporary diseases were added. When considered together with their families, it is clear that the fact of disability affects a significant part of the population. (Source: <https://www.aile.gov.tr/media/5657/nka-internete-verilecek-2-5.pdf>)

II. Accessibility

Accessibility means everyone's ability to independently and safely access and use any place and service they want.

Making the daily life and physical environment easy and accessible for people with disabilities who affect a great part of the population is dealt within the concept of "accessibility". The most important condition of making the daily life and physical environment easy and accessible for people with disabilities is the widespread implementation of standardization activities.

Physical barriers to participation in the social life can only be overcome when all urban services and facilities are completely designed in accordance with the accessibility standards.

The existing accessibility standards in connection with the people with disabilities cover following headings:

- **Accessibility to Buildings and Open Areas:** Accessibility to residential buildings, business and shopping centres, education and healthcare buildings, cities, provinces, regions and open areas of similar scale.
- **Accessibility in Transport:** Accessibility to railways, subways, bus terminals, airports and other similar public transportation vehicles.
- **Accessibility to Services:** Accessibility to education, healthcare applications, employment, justice, cultural life, recreational and leisure activities, sport activities, political and social life.
- **Accessibility of Data and Information Technologies:** Accessibility to public websites, internet technologies, virtual libraries, etc. (Mamatoğlu, 2015).

Considering that the people with disabilities still have problems with accessibility in their daily life despite of all the current arrangements and supervisions, it becomes clear how they are challenged under extraordinary conditions. While we observe considerable interest in possible measures after major disasters and emergencies, it is hard to see the same interest in planning and preparedness actions. In order to minimize disaster damage, it is vital to prepare and plan ahead. For this reason, there is a great need for an easy understanding and applicable *Disaster and Emergency Planning Guide for People with Disabilities* that takes into consideration the special conditions of people with disabilities.

Legal Framework and Legislation

I. National Legal Regulations for People with Disabilities

- Constitution
 - Article 61 of the Constitution (1982)
 - Article 10 of the Constitution which was accepted by the referendum held on September 12, 2010
 - Paragraph 8, Article 42 of the Constitution
 - Constitutional Article 60 "Social Security Right"
- Law on Disabilities 5378
- Legal Regulations for Ensuring Accessibility for People with Disabilities:
 - TS 9111: "Requirements of Accessibility in the Buildings for People with Disabilities and Mobility Difficulties", 2011
 - TS 12576 "Design Rules for Structural Measures and Signs for Accessibility on Pavements and Pedestrian Crossings" (2012; it was confirmed in 2017).
 - TS 12460: "Rail Transport Systems Section 5: Design Rules at Facilities for People with Disabilities and Elderly 1998.
 - TS ISO 23599: "Aids and Tactile Paving Signs for Visually Handicapped or Low Vision People" (2012).
 - TS 12694: Railway Vehicles – Passenger Cars – Car Arrangements for Travel of the Handicapped Passengers by Wheelchair (2011).
 - TS ISO 23600: "Aids – Pavement Traffic Signs – Sound Signalling and Tactile Paving for People with Visual and Hearing Disabilities" (2012).
 - TS 13536: "Complementary Standard for Implementation of TS ISO 23599" (2012).
 - TS 13622: "Accessibility Requirements of People with Disabilities and Mobility Difficulties in the Public Transport Systems" (revised in 2016).
 - Standards on Lifts, Hoisting and Conveyance Platforms (2012).

II. Public Institutions and Organizations for People with Disabilities

- General Directorate of Services for People with Disabilities and Elderly (Ministry of Family and Social Services)
- General Directorate of Services for Children (Ministry of Family and Social Services)
- General Directorate of Social Assistance (Ministry of Family and Social Services)
- Department of Human Rights (Ministry of Justice)
- Turkish Revenue Administration (Ministry of Finance)
- Ministry of Health (Ministry of Health)
- Turkish Employment Agency (ISKUR) (Ministry of Labour and Social Security)

- Social Security Institution (Ministry of Labour and Social Security)
- General Directorate of Special Education and Guidance Services (Ministry of National Education)
- General Directorate of Family and Social Services (Ministry of Family and Social Services)

III. International Statutory Regulations Regarding People with Disabilities to Which Türkiye is Part

- UN Convention on the Rights of Persons with Disabilities
- Supplementary Optional Protocol of UN Convention on the Rights of Persons with Disabilities
- Sendai Framework for Disaster Risk Reduction

European and Mediterranean Major Hazards Agreement (EUR-OPA)*

Open Partial Agreement on European-Mediterranean Major Natural and Technological Hazards (EUR-OPA) is an intergovernmental platform established by the European, South Mediterranean and Western Europe countries for cooperation in the field of major natural and technological disasters under the roof of the European Council.

According to EUR-OPA Agreement, signed in 1987, the centre set up in the body of AFAD is designated as European Natural Disasters Training Centre (AFEM) similar to other units in the specialized centres established in each country to fulfil such tasks special to it. AFEM operations are carried out by the Department of Planning and Risk Reduction.

Guidelines for Assisting People with Disabilities during Emergencies, Crises and Disasters

1. People with disabilities should receive support that is as good as that enjoyed by the general population.
2. The support should be tailored to the whole range of potential individual needs, and it should be recognised that, as a wide variety of disabilities is involved, needs vary considerably from one person to another.
3. Planning for the care of people with disabilities should involve political authorities, public administrators, civil protection authorities and civil society organisations.
4. Emergency plans should consider persons with disabilities individually rather than as groups or categories.
5. The locations and emergency needs of people with disabilities should be known and assessed before disaster strikes.
6. Special emergency planning provisions should be made for care homes, psychiatric hospitals and other centres where people with disabilities are likely to be concentrated.
7. Education programmes for all who are involved in planning for, managing, responding to or recovering from disasters should include information on how to improve provisions for people with disabilities.
8. Alert processes should be configured in a way that automatically includes the needs and capacities of persons with disabilities (*the Design for All principle*).
9. Evacuation, emergency transportation, sheltering and rehabilitation processes should not

discriminate against people with disabilities but should ensure that their needs are catered for.

10. Emergency responders should maintain a correct, professional and non-discriminatory attitude to people with disabilities.
11. Emergency responders who are required to lift and transport people with physical impairments should receive appropriate training and have appropriate equipment for these tasks.
12. In pre- or post-disaster evacuation, procedures should be in place to ensure that no one is left behind.
13. Rest centres and temporary dormitories should be equipped to accommodate people with disabilities who are expected to use them.
14. People with disabilities should not suffer discrimination in the assignment of temporary, post-disaster accommodation, which should be accessible to them and designed to meet their essential needs.
15. Procedures should be put in place to ensure that people with disabilities are not discriminate against during planning, warning, alert, evacuation, emergency response, respite, transitional refuge or recovery from disaster. Cases of discrimination should be dealt with promptly and fairly.

(*Reference: Alexander, D., Sagramola, S. (2013), *European and Mediterranean Major Hazards Agreement (EUR-OPA), Guidelines for Assisting People with Disabilities during Emergencies, Crises and Disasters*, European Council. (www.coe.int/t/dg4/majorhazards/ressources/Apcat2013/APCAT2013_11_Gudelines_Disability_Alexander_Sagramola_17jan2014_en.pdf) (ET: July, 2020)

6 Steps of Disaster and Emergency Planning for People with Disabilities

1. Risk Assessment and Mitigation

2. Making Disaster and Emergency Plan

3. Planning Disaster and Emergency Evacuation

4. Disaster and Emergency Drills

5. Things to Be Done during/after Disaster and Emergency

6. Recovery Phase after Disaster and Emergency

1st Step

Risk Assessment and Mitigation

Disasters and emergencies affect the life as a whole depending on their severity. Mitigation of disaster and emergency is only possible with awareness of individuals and societies and preparedness for such events previously.

The preparedness process for disasters and emergencies requires the cooperation of families and all authorized public and private organizations, taking their responsibilities properly. Awareness of disaster and emergency and preparedness for them should be a part of safe life culture of any individual. Safe life, knowledge and preparedness mean protection against any loss that such hazards may bring about. Hence basic information must be learned and taught for protection against a variety of hazards that may occur at any time such as earthquake, fire, strong wind, deluge, flood, lightning, landslide or heat waves.

Understanding Disasters

Individual preparedness against disasters and emergencies starts by understanding the types of disasters which pose risk to affect your region.

Disasters can be classified differently by their types, causes and severities. The most common classification is to sort by cause of occurrence. Accordingly, disasters can be divided into three types, caused by nature, human and technology:

Natural Disasters

- Earthquake
- Flood and storm water
- Landslide/rock fall
- Wildfire
- Avalanche



- Hurricane, whirlwind
- Volcanic eruption
- Drought
- Famine

Human-made Disasters

- Human-made chemical, biological, radiological, nuclear (CBRN) accidents
- Traffic accidents
- Industrial accidents
- Accidents caused by overcrowding
- Immigration and displacement due to war and conflict
- Terrorist attacks
- Arson

Technological Disasters

- Chemical, biological, radiological, nuclear (CBRN) arms and accidents
- Mining accidents
- Industrial accidents
- Traffic accidents

Disasters have many effects and not all of them are predictable:

- Storms with strong winds and earthquakes can move surrounding objects, break them and leave debris behind.
- Floods, earthquake and heavy storms can make roads and walkways unusable and can cause debris that took weeks to clear it (sludge, cracks).
- Well known structural or urban images inside or outside can be displaced or destroyed.
- If you have any service animal, it could be injured or may be under such a fear that it may not guide you.
- Your home may be damaged or isolated from its surroundings and it may be damaged so much that you won't be able to live in it.
- Electric, gas, water, sewerage and telephone services may not operate for a while.
- Noisy evacuation centres may affect your hearing devices and the direction sense of people with visual impairments.

The first step of disaster and emergency preparedness is to create awareness in this respect. In this context, it is important to know and follow national and local institutions and organizations. Established by Law No. 5902, enacted in 2009 by the Ministry of Internal Affairs, the **Disaster and Emergency Management Presidency** (AFAD) is the main national institution operating in the field of disasters and emergencies. AFAD operates in 81 provinces with the Provincial Disaster and Emergency Directorates and in 11 provinces with the Disaster and Emergency Search and Rescue Unit Directorates, directly attached to the governors in the cities.



The primary task of the Provincial Disaster and Emergency Directorates is to identify any hazards and risks of disasters and emergencies and provide information about conditions that pose threats in order to implement the provincial plans for prevention of and response to disasters and emergencies in cooperation with the public institutions and organizations by means of the local administrations. Telephone numbers and contact info of the Provincial Disaster and Emergency Directorates are found in the related website (see p.48). According to the Disaster and Emergency Training Centre, attached to AFAD, public buildings and private business companies and offices should also have a disaster and emergency plan too like the families and schools do.

If the organization where you work does not have any disaster and emergency plan, you may give assistance for preparedness, development and implementation of such a plan and make contribution to raising awareness in this respect.

What Are Hazard, Risk Analysis and Mitigation?

The objective of this chapter is to ensure you to make assessment of the hazard you encounter and the vulnerability and capacity about it and plan the application steps of mitigation. .

Hazard; includes all events caused by nature, human and technology which may lead to physical, economic and social damage. The hazard may also be expressed as an inevitable and natural part of human life. It is inevitable for us as individuals to be acquainted with hazards in our daily life such as home accidents, falling, fire, traffic accidents and violence acts. A life free of any hazard is not possible. There is no settlement, region or country free of any hazards in the world, irrespective of its level of development. However, the development level of the countries, communities and individuals and level of measures directly affect whether hazards caused by nature, human or technology lead to catastrophic results or not.

Risk; is the possibility of a hazard to transform to a disaster and the expected negative results and damages that such possibility may cause.

Vulnerability; is the situation where individuals, communities, organizations or countries are devoid of any equipment and sources (capacity) to cope with and to reduce results of any hazard once they are exposed to it.

Capacity; are the features and sources that the individuals, organizations or countries have for anticipating and coping with the effects of any hazard or surviving from it with minimum damage.

Example



- A broken bottle thrown on the beach is only a **hazard** as long as there is nobody there.
- When there is a person walking barefoot on the beach, the broken bottle is a **risk** for that person.
- When the person walking barefoot on the beach treads on the broken bottle, he/she becomes **vulnerable**.
- A person that wears slipper thinking that there may be something harmful on the beach has the **capacity** of not being vulnerable from the broken bottle.

A Safe and Prudent Way of Life



For preparedness against earthquakes and other disasters and emergencies, you and your family should adopt to a safer and more prudent way of life. It is possible to start it by taking some small steps:

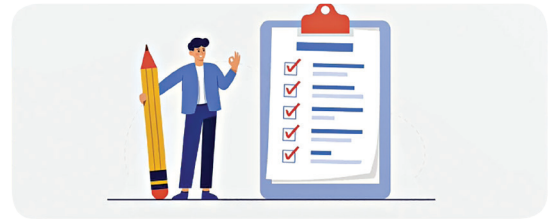
- A visually impaired person, for example, should make it a habit keeping his or her white cane near at home or a person with disability using a wheelchair should make it a habit blocking its wheels to prevent it from moving away.
- As another step for switching to a safe daily life, you may build your support network and plan or know how to switch off gas, water and power in the place where you permanently live.

Risk is the combination of the factors of hazard and vulnerability. On the other hand, capacity is the opposite of vulnerability; the higher capacity, the lesser vulnerability and, consequently, the transformation possibility of a hazard to a risk. In short, the thing that reduces or increases the disaster risk is the vulnerability level of the society. When mitigation operations are performed and the level of vulnerability is reduced, also the effects of the disasters that may encounter will be reduced. The transformation of a hazard to a disaster occurs as a result of their considerable damage to life, natural environment, properties and business continuity.

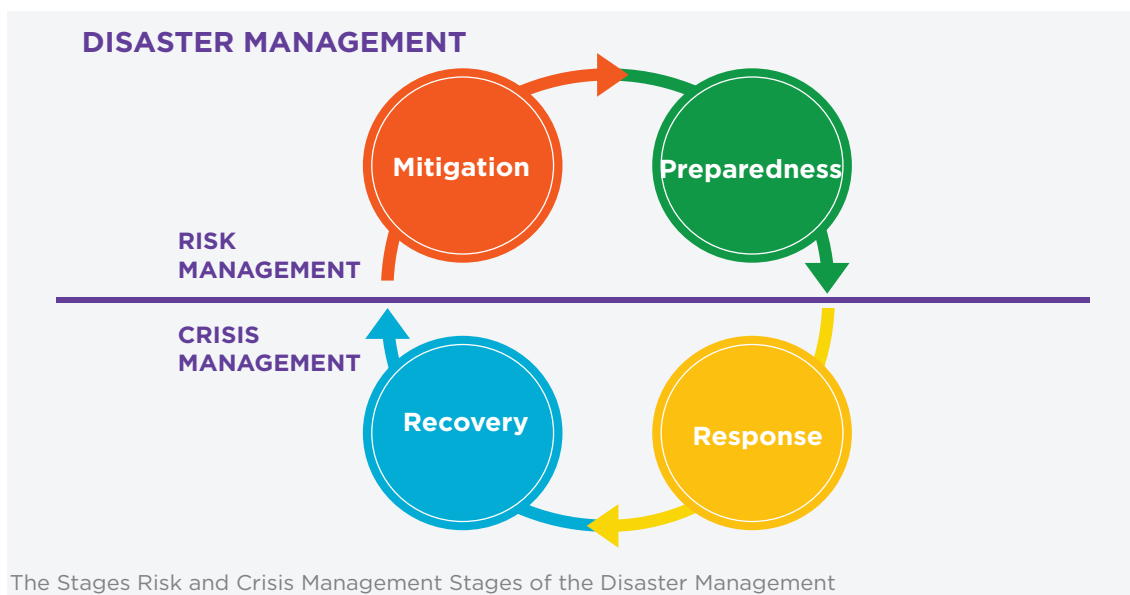
Disaster is an event caused by nature, human or technology that gives physical, economic and social damage to the society as a whole or to some parts of it; stops or interrupts routine life and human activities where capacity of the society proves to be insufficient to cope with it. Disaster is not the event itself, but the result it creates.

Emergencies are negative effects of the hazards on life, property and environment that can be coped with local facilities. Home fire that can be extinguished by the local fire brigade, for example, is considered as an emergency.

All hazards and risks may not be eliminated, but reduced. Therefore, the **Risk Management** as the first stage of the **Disaster Management** concerns operations of mitigation and preparedness. The second stage of the disaster management is **Crisis Management**. In the crisis management, response and recovery operations may be performed by concentrating upon the things to be performed during and after the event of disasters and emergencies.



Basic Components of Disaster Management



A person with disability should make some preparations in advance to minimise any problems that he/she may encounter during and after an earthquake or another disaster and emergency. While these preparations may be common for all groups of people with disabilities, some may have differences depending on their specific group of disability. For completing such preparations correctly, persons around people with disabilities should also become a part of this operations together with them.

Risk Analysis and Mitigation of Disasters

When necessary measures are not taken, many objects around us may become a source of hazard for us during a disaster and emergency. This section deals with identification of possible hazards and risks prior to basic types of disasters and general measures to be taken for mitigation; the disasters typical for our country are discussed more specifically.

Before Earthquake

- Identify a sturdy object (a fixed home appliance, table, etc.) in each room that you may stand near or under it. This is important, because motion to occur during the seismic event will, most probably, not allow you to take a long distance for escape. When the earthquake strikes, decide on how to get to that point you identified previously.
- Replace broken power cables, repair any leaking natural gas lines and loose connections. **Get professional assistance, do not try to repair gas or power lines on yourself.**
- Fix the partition walls, glass partitions, water heater, refrigerator, cabinets and files, and also oven and gas-fuelled appliances. If recommended by your gas company, install automatic shut-off gas valve in case of severe quakes.
- Place large or heavy objects on lower shelves. Fix the shelves, mirrors and big picture frames on the wall. Support high and heavy objects.
- Fix lighting fixtures on the ceiling.

- For preventing gas and water leaks use pipe joints. Flexible pipe are more resistant to breakage.
- Carry out drill at home and office:
- Action of **DROP-COVER-HOLD ON** or **LOCK-COVER-HOLD ON** (for persons using wheelchair) is applied in case of hazards such as earthquake, air crash, landslide, bomb blast, bomb threat, lightning and whirlwind. For example, when it starts to quake or a big explosion is heard/sensed, this action should be performed. The objective of the action of **DROP-COVER-HOLD ON** is to make the target smaller to get less damage. Making the target smaller is to take position by crouching your body as much as possible to make it a smaller target to prevent yourself from being an open target for the objects that may fall on you or may give you damage in any way.
- It is scientifically proved that acquaintance with the action of **DROP-COVER-HOLD ON** or **DROP-COVER-HOLD ON** (for persons using wheelchair) doubles chance of people to act correctly without panic at time of earthquakes. Hence, whether you are at home or office, outside or any other place, it is important to know how to protect yourself at the moment of an earthquake.

If you previously practice together with your family, classmates or friends what you will do during an earthquake, your reflexes will automatically direct you to the correct actions when earthquake strikes.

Before Flood

- Follow radio or television broadcasts.
- Never rent or purchase a building on a flood plain if it is not elevated and reinforced.
- If you live in a region exposed to flood risk, put the heater and power switchboard on a higher place.
- Get familiar with the location of gas, water and power supplies at home and make sure you know how to cut them off.
- Put the important documents on a higher level (on the table or shelf, etc.) prior to flood risk to protect them from being destroyed by flood. Likewise try to keep your hearing aids and similar appliances on a higher, but the nearest place or by the side of your bed.
- Attach check valves (valves automatically blocking water flow in reverse direction) to the waste water drains to prevent the flood-water strikes back to the drains of your home or office.
- Construct barriers (banks, beams, flood walls) to prevent the floodwater from entering into the building.
- Apply water insulation on the basement walls to prevent any possible leakage.





- Be informed about locations where flash flood occurs such as streams, drainage canal and canyons.
- Be aware that flash flood may occur in such place without any typical signs of rain clouds or rain shower.
- Take out insurance for your office against flood risks.
- Participate in training programs on fighting against flood and storm water. Get first aid training.

Before Fire

Especially fire at home constitutes a great risk for all people with disabilities, but especially for people with physical and mental impairments. Fires frequently occur in the kitchen or similar cooking spaces.

Home fires to which people with disabilities are exposed cause considerable loss of life and injuries and financial loss. Cooking stands out as the primary cause of home fires.

The following measures should be taken into consideration in this respect:

- **Identify the fire risk:** Having a disability does not mean that you cannot protect yourself and your family against fire. Develop a fire protection plan according to your individual conditions. If you are a relative or caretaker of a person with mental impairment or a person with ASD who has difficulty in expressing himself/herself, you should develop that plan on yourself.
- **Install and maintain smoke and gas alarms:** There are smoke alarms for persons with hearing impairments that vibrate or flash bright light. Test the smoke alarm batteries each month and replace them once a year at least. If you have not access to the test button on the smoke alarm, ask another person to test it for you.
- Keep a fire-extinguisher in an easily accessible place.
- Do not plug many electric appliance to the same outlet.
- Get your power and gas installation inspected frequently.
- Get an emergency alarm and lighting system installed.
- Do not keep igniting and flammable materials all in the same place.
- **Try to be near the exit:** Although you are legally entitled to live anywhere you like, if you live in an apartment building, the ground floor would be the safest for you.
If you live in a multi-storey house, take care that your bedroom is in the first/ground floor. Being in the ground floor and near the exit will make your evacuation in emergency cases easier.
- **Make your emergency evacuation plan:** Make your emergency evacuation plan according

to your individual requirements. Identify at least two exits from each room. If you use a walker or wheelchair, check whether all doors on the emergency exit are in sufficient width to allow you passing through them. Make modifications such as ramping or widening the doors to facilitate the emergency exit.

- **Ask for help:** Talk with your family, building manager or neighbours over your fire protection plan and practice it together with them. Call the fire department at a non-emergency line and tell them about your requirements. You may develop suggestions for your emergency evacuation plan or, if you request, they may conduct fire safety control in your house. Request the concerned emergency response teams to keep your information in a file. Keep your phone near the bed and be ready to call the emergency number 112 in case of fire (for fire evacuation planning, see p.85).

Before Thunderstorm:

- Postpone your outdoor recreation activities.
- Enter into a house, building or a vehicle with solid ceiling (not a convertible vehicle). Although you may also be injured due to lightning strike, it is still safer to be in the vehicle than to be outside.
- Do not forget that rubber-sole shoes and wheels of your vehicle **do not protect** you against lightning strike. Only steel frame of the vehicle with solid ceiling provides good protection as long as it does not contact with metal.
- Cut the dead or decomposing trunks or branches that may dislodge and cause serious injury during the thunderstorm.
- Fix the outdoor objects that may be dragged

or pose risk.

- Close the window shutters and fortify the entrance doors. If there are no shutters, close roller blinds or solar screens or close the curtains.
- Do not take a shower or have a bath. Sanitary piping and bathroom fixtures may transmit electricity.
- Use wired-phones only for emergency. It is safer to use wireless phones and cell phones.
- Unplug the electric appliances, computers and similar devices and switch off the air-conditioners. Power surges due to lightning may cause serious damage.
- Use battery-operated radio to follow updates from the authorities.

Keep away from following:

- Tall trees standing along in the open fields that serve as a natural lightning rod.
- Hills, open spaces, seashores or boats in the sea.
- Single cabins and other small structures on the open spaces.
- Any metal object; tractors, farm equipment and tools, motorcycles and bicycles.



Remember the 30/30 safety rule:

After you see lightning, start counting to 30. If you hear thunder before you reach 30, go indoors. Remain indoors for at least 30 minutes after the last clap of thunder.

Before Hurricane/Whirlwind

- Pay attention to the changing weather conditions.
- Follow the latest weather conditions via radio or television.
- Observe the following signs of a coming storm or hazard and go to the shelter you have chosen previously:
 - A dark sky, mostly turning to greenish.
 - A shower of large hailstones.
 - Large, black and low cloud formation (particularly if rotating).
 - A high uproar sounding like a freight train.

Before Blizzards/Extreme Cold

Supplies you should include in your disaster and emergency kit:

- Salt for icy walking trails.
- Sand to improve traction of your car.
- Snow shovel and other snow clearing materials.
- Be prepared by storing heating fuel in the event that you may have to remain indoors for a long time; problem may occur in supply of fuel. For example, make quality dry wood available for your fireplace or woodstove.
- Apply thermal insulation on your walls and attics to use the fuel you stored more economically and for longer time; make the windows and doors airtight and insulate them by using weather strips; use double-glazed windows or cover the

windows with plastic.

Clothes suitable for weather conditions:

- Wear multiple layers of loose, light and clothes keeping warm, instead of a single layer of thick clothes.
- Outer clothing should be tightly-woven and water repellent.
- Prefer mittens that keep warmer than the others.
- Keep thick hat/cap available.
- Keep a scarf available to cover your mouth to protect your chest.

Before Tsunami

If you live in a region exposed to tsunami risk, get information about the existing alarm systems and things you should do. Make sure that your personal network gains such information to make you informed in case of possible alarms.

Before Pandemic

When the lockdown gets started, develop solution options together with your personal network. Determine what kind of support for what restrictions you may get from whom according to your care needs. If you are in need of more intensive care, try to develop alternative arrangements for your personal care and food preparation. If required, identify the member(s) of your support network to stay with you at home when the pandemic hits the highest peak. Make sure that your support network will make you informed about any alerts.

Before Chemical, Gas and Nuclear Leak

If no space has been reserved as a shelter in your building, designate a place with minimum number of windows looking out and having the

strongest wall as a shelter in the basement or ground floor in case of a nuclear accident. In the event of a chemical gas hazard, designate a place as a shelter in the inner part of the building, in the upper floors if possible, with small number of windows and suitable for protection. You should previously make available food, water, lighting tools and basic first aid materials in this place. If you have a service animal, do not forget that you may also need food, water and first aid materials for it. Make sure that your personal network also gains such information and informs you in case of any alert.

Before Landslide

You should get any important data about landslide and take measures accordingly. Landslide, with the rate of 45%, is the most frequently seen disaster in the settlements of Türkiye in the period of 1950-2008. The areas much exposed to the risk of landslide are:

- Old landslide regions,
- Upper and buttress parts of the natural slopes,
- Upper and buttress parts of a very steep and deep slopes,
- Upper and buttress parts of the old backfills,
- Hills, where waste systems are used and settlements have been developed.

Especially, eastern, western and central parts of the Black Sea Region are settlement units in Türkiye where landslides are more widespread.

The safe places for landslide are:

- Slopes formed by hard and massive rocks, where no landslide has occurred in the past,
- Relatively low inclined land without any sharp change of inclination on the slope,
- Top or around of the crests protruding inform

of nose.

Hence, if you live in or near a region with a risk of landslide, you should be attentive to the following points:

- Get information about the potential geological disasters in your location.
- Consult the geologists, engineers and local administrations (municipalities) about the problematic areas for landslide.
- Avoid excavation operations at the buttress part of the steep slopes and constructing buildings at the edge or base of the steep slopes.
- Before choosing a construction area, purchasing a land and starting construction, get information from public organizations like local planning authorities and local administrations such as municipality and decide afterwards.
- Make an insurance for your apartment, home, property against the type of disaster that pose threat to you.

Summarized Check List of Risk Reduction for Disasters and Emergencies

Plan your emergency evacuation according to your personal requirements.

Check whether the corridors, stairways, doors, windows and other spaces have any risks that may prevent you from abandoning the building safely in emergency. Fix or remove any objects or other articles that may block your way. This will provide you a free way of evacuation after the disaster.

Keep your emergency lights plugged in the wall socket. When the power is off, these lights will automatically switch on and lighten the evacuation way for you and your support network. The lightening period of the emergency lights is four to six hours; however, you may manually switch them off daytime to save on batteries.

Fix the framed pictures, mirrors, cabinets and other heavy articles to the wall by using screws.

Fix your bookcases to the wall by using screws. Put edging in front of your shelves to prevent the books and fragile objects from falling down.

Fix the large electric appliances such as oven, refrigerator, washing machine and drying machine to the wall by using steel clamps. Lock the wheels of large electric appliances.

Use latches for the doors of your cabinets to prevent their contents from falling due to quake.

Fix the computers, oxygen equipment or other heavy articles to the stronger objects by help of hooks and belts.

Plants hanging from the ceiling may also pose hazard. It is safer to fix the hooks by means of screw. Use plastic flower pots instead of heavy ceramic ones. Place these elements on safe places.

Fix the pictures having gloss or sharp frames by means of clamp or hook screw.

Place your bed away from the windows and heavy articles.

Arrange your furniture to allow multi-optional ways to go through.

Make sure that the tiles and bricks on the roof and chimney are fixed.

Make firm the heavy objects by wire, durable tapes or strips.

Place the heavy objects on the lower shelves.

Fix desktop equipment such as computer or television by using proper tapes.

Minimize the materials that may be hazardous. Keep them in separate places so that they do not mix with each other to form dangerous explosions or toxic gases in case of quake and breaking. Keep any toxic substances that may be hazardous in unbreakable containers with safety lock in a safe, well-ventilated store, away from the heating sources; keep them away from the water tank; keep them out of reach of the children and pets.

Install fire alarms.

Select some of the fire detectors from battery-operated ones.

Keep a fire-extinguisher at an easily accessible place.

Be familiar with the places of the gas, water and power sources at home and make sure you know how to cut them off. They should be accessible easily.

Keep your important documents and hearing aids at a higher level to protect them against damage due to disasters such as flood. Keep your wheelchair, hearing aids, etc. nearest to you or by your bed.

Get information about potential geological disasters in your location.

Before choosing a construction area, purchasing a land and starting construction, get information from the public organizations like local planning authorities and local administrations such as municipality and decide afterwards.

Make an insurance for your apartment, home, property against the type of disaster that pose threat to you.

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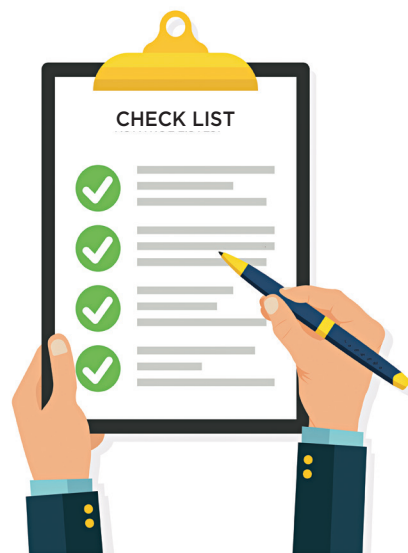
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2nd Step

Making Disaster and Emergency Plan

Making a previous plan for disasters and emergencies may save your life. The better you prepare and the more you make drills before disasters and emergencies, the better will be your ability to cope with and survive disasters and emergencies. Your personal disaster and emergency preparedness is an ongoing process. Disaster and emergency plan helps you and your support network to identify, get, develop, manage and maintain the information and resources necessary to cope with an event when it occurs. Furthermore, remember that usual ways of support and assistance may not be accessible for a while during evacuation and after disaster and emergency.

The preparedness planning of people with disabilities for disasters and emergencies consists of two stages.



The first stage is **building a personal support network** and the second one is the **assessment of your capability**. General recommendations on evacuation and drills given in this chapter are given detailed in Chapter 3 and 4.



Building Personal Support Network

Personal support network (personal assistance team) helps you get prepared for disasters and emergencies and ensures you to identify and use the resources necessary for you to cope with them effectively. It is therefore important, to build a personal support network that covers your home, school, office and other places you spend your time.

Identify your possible requirements during a disaster and share them with your personal network. Members of your support network may include your flatmates, relatives, neighbours, friends, colleagues, caretakers and local disaster volunteers and officials.

It is important to identify the persons who live in the same region as you and who you trust and who may check you whether you need any assistance. The persons in your support network should be familiar with your capabilities and needs, and provide you help as soon as possible. Do not trust only one person. Add minimum two persons to your network for each location where you regularly spend time, taking into consideration that people may work in different time intervals, may be on holiday or may not be accessible all the time.



You may have to build a separate disaster and emergency plan for different places such as home, school or office where you spend much of your time together with your family and/or support network.

This plan should also include information on how to communicate with the persons in your personal support network during disasters and emergencies.

Capability Analysis

First of all, prior to the occurrence of a possible disaster and emergency, you should identify the things you can do by yourself and the things you may need assistance of others during and after such disasters and emergencies. The objective of this chapter is to ensure you to gain the ability of preparing a disaster and emergency plan by evaluating your capability and the support type and level you need.

In addition, as unexpected things may develop during disasters and emergencies, you are recommended to take your lowest possible performance level as basis. You may deal with the capability analysis under two headings, e.g. access to basic needs and evacuation. You may use the following check lists to make your personal capability evaluation.

Access to Basic Needs

- If there are special equipment you use for self-care, personal cleaning and food, make a list of them; write how they operate and share this list with your personal support network.
- Remind all persons who assist you about important cleaning matters. Limited amount of water and increasing medical threats will rise the possibility of infection.

- Prepare a map showing places of your medical drugs, aids and other articles you need and how you will be taken out of home and share it with your personal support network.
- If there are special equipment and objects such as wheelchair, walker or white cane that you will need for access and mobility after a disaster and emergency, include them in your plan in form of instructions to be easily and clearly read and understood. If the instructions include carrying support, it should also indicate the points that should be carefully considered to carry you safely, as well as the risks to which you are exposed (for details about evacuation, see p.58 and p.85).

Evacuation Plan

- Identify the evacuation routes and safe areas. In disaster and emergency, you may have to abandon the place where you are as quickly as possible.
- Make sure that every member of your family is familiar with the best emergency evacuation routes and the safe places at home for each kind of disaster and emergency. Draw a simple floor plan of your home on a page. Mark the location of the doors, windows, emergency kit(s), fire-extinguisher, smoke alarms, other visual and audial alarms and first aid kit in this plan. Mark the important points such as fire exits, stairs and lifts.
- Identify minimum two evacuation routes from each room and mark the point outside the house where household people and/or your personal caretaker shall meet in case of disaster and emergency.
- If you or anybody in your house use wheelchair, arrange your home suitable for an exit



with wheelchair. Perform emergency evacuation drills minimum once a year. Such drills should be repeated more frequently and in regular intervals in case of mental impairment.

- Can you open the main valves of the utilities (gas, water, electric)? Do you know where the main valves are? Are they accessible for you?
- Can you use a fire-extinguisher? If you cannot, did you arrange it in a way that you can use it?
- Can you carry your disaster and emergency kit? How long can you carry it without assistance? Do you keep a similar kit in any other place?
- Did you change the place of any objects that that may block your escape route and did you fix those to the wall which have risk to topple?
- Write instructions for the following points and take one copy for yourself and your personal support network:
 - Shut down the utilities; attach colour tapes or tags for quick recognition.
 - Tag the main gas valve, electric meter and main water valve to identify them easily. When you sense a smell, warn your personal support network to check for gas leakage.

- Identify obstacles and possible risks in the escape route. Change those that you can (clear off any obstacles in the corridors and fix heavy objects such as bookcases that may block your way).
- Plan alternative evacuation routes. If required, create a ramp for quick evacuation (for details about evacuation, see p. 58).

Capability Drill

Self-sufficiency or capability drill means essentially **making yourself safe**. Carry out a drill on making concise explanation to your supporting persons about how they can guide or move you and your equipment quickly and safely. Be prepared to give short, clear and specific instructions and directions to the search and rescue personnel. If you have any verbal or communicative incapability, keep pre-printed messages with you. If you are a relative or caretaker of a person with mental impairment or ASD who may find it difficult to express herself/himself, then teach him/her how to show a written message containing important information to persons who may help him.

- **Ask the search and rescue team for help if you need.** For example, make the response or relief personnel informed that you are not capable of waiting in a line for water, food or relief aid for a long time. Practice how to explain clearly and briefly why you need this assistance. You may want to write it down ahead of time.
- **If driving a vehicle, remember that your fuel tank should be more than half full at all times.** Also provide a small disaster supplies kit in your vehicle. If you do not drive, talk with your network about how you will leave

the area if the authorities advise an evacuation. In some cases, search and rescue teams will organise controlled evacuations. Relevant instructions are given through radio.

- **Review closely the disaster and emergency evacuation plan of your office, school or any other location where you spend most of your time.** If the current plan does not have any arrangements concerning people with disabilities, make the management informed about your needs. Make sure you are included in the disaster and emergency evacuation plan of the building.
- **Choose a place, which is alternative to stay.** If you are told that you have to leave your home, find a place to stay with friends, family or a hotel/motel outside your area.

A few examples:



- "You have to carry me. If you get an evacuation chair with hanging apparatus, I'll tell you what you should do."
- "Firefighter carry" is dangerous for me because of my disability. Carry me by using"
- Please take my oxygen tank as well. I can breathe only for 15 minute swith-out it."
- "I am visually impaired. Let me take your left arm above the elbow, so that I may follow you out."
- "I may have difficulty in hearing what you are saying. Speak slowly and use simple words."
- Other

Sometimes warnings made before some disasters (slowly rising flood, hurricane, etc.) give you sufficient time for this purpose.

- **Make a plan for your animals.** Unlike the service animals, the pet animals are not allowed into the shelters. You should have with you the vaccination records, food, medications, ID tag and harnesses of your service animals.
- **Generate checklists for different sections of your Disaster and Emergency Plan.** Enter the completion date of each preparation and review and update it continuously.
- **Install at least one smoke detector to every floor of your home, outside the sleeping areas.** If you are deaf or hard hearing, install a warning system which meets your needs; for example an alarm with flashing lights to attract your attention. Replace the batteries once a year and choose a date that is special and you can remember easily such as your birthday. Test the system once in a month by pushing the button.
- **Learn the location of your utilities in your home and how to use it.** Locate the utility cut-off valves and switches in your home. Learn how and when to use them in emergency. Try to do it yourself (do not attempt to turn off the gas for drill). If you cannot do the drill by yourself, build a support network to help you. Turn off utilities only if local officials instruct you to do so or if you consider there is an immediate vital threat. If you, for example, see or hear sparking wires or notice water gushing from broken pipes, you should immediately turn off all utilities. If it smells, do not touch the electric utility. **Remember that if you turn gas off, only a professional should turn it on again!** If you don't know how to use



the proper tools to turn the utilities off at the main valves or switches, then you should turn off the valves under the washbasins and sinks and by the stoves, ovens or heaters. Also turn off all electric switches in all rooms (except those where life-supporting equipment operate).

- **When you are travelling inform the hotel about your needs in a possible emergency.**

Explain the type of help you may need. Remember to let members of your support network know your travel plans, e.g. when you will leave and come back.

- **Prepare your evacuation plan before a potential disaster and emergency.** If you are forced to leave your home or workplace, you may need help for safe evacuation, especially for going downstairs. If you need help and your network is not available during an emergency, find people to help you and tell them about your condition. Explain them what you need and how they can help you for evacuation. Try different ways to go out of a building beforehand, especially if you live above the first floor of a multi-storey building. Remember, the elevator may be out of service or is banned to use!

Decide what type of equipment you may need for support during evacuation. If you cannot use the stairs, discuss with your support network about how your evacuation should be. They may want to receive special training for a proper and safe way of lifting and carrying you without giving any harm to you or themselves. If you are in need of special devices for emergency escape, consider your physical capabilities before you purchase them. Place these devices nearby where you can easily have access to them (for detailed information, see p. 85).

Working with Your Support Network About Preparedness

In order that your disaster and emergency plan works properly:

- **Get together with your family, support network and caretakers.** Get together with people such as your family members, relatives taking care of you, members of your individual support network and building managers and discuss about local emergency hazards and what preparedness can be made for them.

- **Determine an out-of-town contact.** Ask a friend or relative outside the city to be your contact person. Family members should call such persons upon a disaster and tell them where they are. Everybody should know the phone number of the contact person. A long-distance call after a disaster is generally easier to make than a local call.

- **Determine where to get together.** You may fall apart from the household in emergency. In the event of a sudden emergency such as a fire, choose a place just outside your home as a gathering point. You may also select a place outside of your district to avoid the effects of a disaster and emergency affecting a larger area.

- **Share your disaster and emergency information.** Enter all details about your disaster and emergency information in the **Disaster and Emergency Information Card** and **Disaster and Emergency Medical Card** share them with the members of your support network.

Disaster and Emergency Information

Disaster and emergency information should contain communication information about your family members, members of support network, caretaker, office or school. Your plan should contain information about your out-of-town contact, place of get-together, Disaster and Emergency Management Presidency (AFAD, Provincial Directorate of Disaster and Emergency and, if any, voluntary non-governmental organizations. And you should also teach your children how and when to call emergency phone numbers. Make sure each family member has one copy of the communication plan and attach a paper/form with these numbers near the phone. Make a copy of this form available in your vehicle, office, disaster and emergency kits, wallet and wheelchair to have access easily to it. Make sure that these numbers/contact information are also saved on your mobile phone.



Sample Form of Disaster and Emergency Information Card

Please complete this form and share a copy of it with the persons you will come into contact in disasters and emergencies and also with the members of your support network:

Full Name:	
Date of Birth:	Phone:
Address:	

Local Emergency Contact:	Emergency Contact Number:
Members of Support Network:	Contact Numbers of Members of Support Network:
Out-of-town Contact:	Out-of-town Contact Number:
Best Way of Communication with Me:	

Note













Disaster and Emergency Medical Card, should contain personal and medical information in order that you can receive medical support and proper medical intervention as soon as possible if you are unconscious or not in a state of communication. The disaster and emergency medical card should have information about medications you take, supporting equipment, allergic status (if any), blood group, medical problems and contact persons. Make a copy of the disaster and emergency medical card available in your vehicle, office, disaster and emergency kits, wallet and wheelchair to have access to it easily.

Sample Form of Disaster and Emergency Medical Card

Please complete this form and share a copy of it with the persons you will come into contact in disasters and emergencies and also with the members of your support network:

Full Name of Medical Doctor (MD):	Phone:
Address of MD:	
Hospital where your medical records are available:	
Allergies:	Blood Group:
Medications you receive and dosages (in a refrigerators or in a cool place):	
Special conditions of medications:	
Physical disabilities:	
Auxiliary equipment/instruments:	
Communication difficulties:	
Mental disabilities:	

Related Contacts		
Provincial Directorates of AFAD	www.afad.gov.tr/afad-il-mudurlukleri	
AFAD Disaster-Prepared Turkiye	www.afad.gov.tr/afete-hazir-turkiye	
LODTAD Let's Overcome Disabilities Against Disasters	disaster.anadolu.edu.tr/course/index.php?categoryid=2	
Foundation of People with Physical Impairments	www.fev.org.tr	
Association of People with Visual Impairments	www.turged.org.tr/kategori-sag.php?id=14	
Turkish Association of People with Hearing Impairments Federation of People with Hearing Impairments	tied.org.tr/ www.ief.org.tr/	 
Association of People with Hearing and Speech Impairments	www.rehabilitasyon.com/kurum/beyaz6/anasayfa/	
Federation of People with Mental Impairments	www.engellilerkonfederasyonu.org.tr/bagli-federasyonlar/zihinsel-engelliler-federasyonu/	
ODFED Federation of Autism Associations	www.odfed.org/	

If you take medications (chemotherapy or radiotherapy, etc.) prescribed by a clinic or hospital, ask your suppliers how you can be prepared against any possible delay in case of disaster and emergency.

Consult AFAD Provincial Directorates or NGO's to get information how you can be prepared against any possible local disaster and emergency.

Disaster and Emergency Kits

Disasters and emergencies are events that disrupt daily flow of life suddenly and cause a great danger on societies exposed to them, leading to loss of life and property. Therefore being individually prepared against disasters and emergencies will assure that you suffer minimum damage until the support you need is provided. A significant stage of these preparations is to determine the materials you need and make them available.

Disasters and emergencies may force you to leave your building or position urgently and wait for arrival of the search and rescue teams or stay where you shelter. In such cases, you should have a disaster and emergency kit which contains the essential material you need to survive.

For preparing your disaster and emergency kit, first make a list of the special materials and equipment you need. Make sure that you take note of the place where you keep them.

Always keep your mobility aids near you. If you have extra aids (e.g. cane), keep them in different places.

You should prepare different types of disaster and emergency kits. You may combine these kits according to your own requirements and use them for different purposes. For this purpose, prepare minimum two separate kits: **Basic Disaster and Emergency Kit** and **Portable Disaster and Emergency Kit**.



Keep the materials related to your disability in both the basic disaster and emergency kit and the portable disaster and emergency kit. If you do so, you can take the materials related to your disability in the portable kit with you when you have to leave home for any reason. If you cannot leave home, then you will use these materials together with the material in the basic disaster and emergency kit.

The disaster and emergency kit should contain tools and instruments related to your disability in addition to food and water that you and your service animal (if any) and family members will need just after a disaster and emergency. **The basic supplies you pack in should last for at least three days or even one week.** When you prepare your kit, you should consider your special requirements. The kit should be easy to carry and you should keep it by your bed or as close as possible to the door. You should review the contents of the kit at least two times a year, considering your changing requirement. Furthermore, it is recommended to keep a similar kit in both your car and office.

Keep the Portable Disaster and Emergency Kit Near You: Get a drawstring bag, a pack with straps having lots of pockets or a small backpack and keep within reach; this portable pack should be by or on your chair, wheelchair, scooter or other device. Keep this kit near you or under your bed at night. Keep your cell phone fully charged and within reached at all times.

Prepare a Disaster and Emergency Kit for Your Car As Well: In addition to the basic disaster and emergency supplies in the check lists, there should be some other disaster and emergency supplies in

your car as well. Several blankets; an extra set of mittens or gloves, a set of woollen socks and beanie; spark plug cables with direction for use, a luminous clothing, and a special radio system or cell phone are musts that should be made available in the car you use regularly. And if you are in a flood zone, you may add a small sack of sand or kitty litter for traction, a small shovel and a set of tyre chains or traction mats.

Remember Your Service Animal and/or Pets:

Together with the supplies related to your disability, supplies for your service and pet animals may also be a part of the basic disaster and emergency kit. It is an option depending on whether you can evacuate or have to stay at home.

Food, water, a leash or harness, a collar and ID tag as well as bowl and plastic waste bags should be in your service animal and pet supplies kit. And, additionally, among other supplies may be a familiar toy/blanket, basic antibiotic cream prescribed by a veterinary and foot protectors against particles of broken glass, debris and hot surfaces. Dogs and cats should wear collars and ID tags. A leash or harness should be used for the dogs, and cats should be carried in carriers. Keep an extra harness or breast collar for each animal in the disaster and emergency kit. Make sure that all licences and vaccinations are up to date. ID tag should contain telephone numbers of both you and your emergency contact.

More Information about Supplies and Equipment If You Have a Physical Impairment:

If you use a wheelchair:

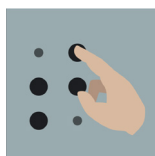


- If your tyres are not puncture-proof, keep a patch kit and a can of seal-in-air product in your portable emergency kit to repair flat tyres. Also keep extra inner tubes.
- Keep a pair of safety gloves in your portable emergency kit for use when you wheel or make your way over particles of broken glass and debris.
- If you live in a seismic zone, keep the wheelchair close to your bed with its wheels locked against moving or falling.

If you use a motorised wheelchair or scooter:

- Get an extra battery. A car battery can be used for a wheelchair.
- Consult to your supplier to ask whether you can charge your batteries by either connecting to a vehicle battery or connecting the battery to a converter that plugs into the car cigarette lighter. Attention: Charge only one battery at a time!
- If affordable, have a spare lightweight manual wheelchair.

If You Have a Visual Impairment:



- Get a talking or Braille clock or large-print timepiece with extra batteries.
- Have minimum one spare white cane.
- Mark your disaster and emergency supply

items with fluorescent tape, large print or Braille.

- Mark the shutoff valves of gas, water and power with fluorescent tape, large print or Braille.
- In case you use, get extra magnifiers.
- In case you use, get an extra pair of glasses.

If You Have a Hearing Impairment:



- Keep a notebook and pencils in the disaster and emergency kit at home and in the portable disaster and emergency kit. Have them with you at all times for communication.
- Keep noisemakers like a torch or whistle nearby your bed.
- Always keep a card in the disaster and emergency kit at home and in the car and with you that indicates that you have hearing impairments. Include other personal information in this card, e.g. "I do/do not know Turkish Sign Language".

If You Have a Speech or Communication Impairment:



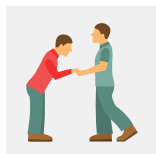
- If you use a laptop or electric communication device to communicate, buying a power converter (transformer) may be useful. It may enable you to use your laptop or communication device by means of the lighter in your car. Be sure to have spare notebook and pencil.
- If you use a device such as an electronic communicator or artificial larynx for communication by voice, keep it in a safe place close to your bed at night.

- Keep copies of a word or letter board and printouts of key phrases in all your disaster and emergency kits and wallets for use in case of disaster and emergency.

If You Practice Self-Medication:

- Remember that traffic delays and/or adverse weather conditions may occur unexpectedly. Make sure you have the equipment and fluids (thermally-controlled) that you need when travelling.
- Keep your medical supplies of vital importance you may need in such points, that other persons in your support network may also have access to them.

If You are a Family Member or Care-taker of a Person with Mental Impairment or Autism Spectrum Disorder (ASD):



- People with mental impairments may have difficulties in communicating the required information due to problems of memory, concentration and learning. Hence it is quite important for a mentally impaired person to have the **Disaster and Emergency Medical Card** in his/her disaster and emergency kit or wallet. Furthermore, it would be appropriately to do repetitive practices with the mentally impaired person regularly for his/her showing this card to the concerned authorities.
- **Disability ID Card** is another one that people with mental impairments should have in their disaster and emergency kit or wallet. In addition, it is also recommended that people with mental impairments who may need

Remember!



It is a correct practice for you to have emergency medical information containing important medical and emergency contact info with you all the time.

Emergency medical information make the search and rescue team informed about important matters about you in case of disaster and emergency if they find you unconscious, confused, in shock or just unable to give any information.

The emergency medical information should be reviewed and updated each time your medications or other information changes, in any case at least two times a year.

support of other people in case of disaster and emergency should wear an identification tag on their arms or neck.

Disaster and Emergency Supplies Storage of the Supplies

Keep the disaster and emergency documents in a sealed and waterproof plastic bag and in the basic disaster and emergency kit. Keep a copy of the documents (about technical specifications/settings of any adaptable equipment or medical equipment) in the basic disaster and emergency kit and also in the portable disaster and emergency kit and together with both the materials related to your disability and the supplies in your car and office.

Keep the other disaster and emergency documents in your disaster and emergency kit at home and thus you may have access to them in case of a disaster and emergency. And also keep your private employment and income documents together with these documents. Additionally, it would also be useful to keep a copy of all important documents in a sealed envelope addressed to a certain person with a statement “open it in emergency”.

Keep your disaster and emergency kit in a dry and safe place easily accessible. This place should be easily located by your support network or persons to arrive for help. If you put your disaster and emergency kit on a shelf, fix it in such a way that it will not fall and not become inaccessible when you need it.

Replace your food and water stock once every year. Also check the expiry of the prescribed medications.

Also replace the materials in the disaster and emergency kit that are about to expire with new ones. Put the new materials in the kit and consume those you take out before they expire; do not borrow items from the kit with the intention of replacing them later, as you may forget to do so.

Disaster and Emergency Supplies Required to be Kept at Home

There are 8 groups of basic supplies you should make available at home. These supplies also include those materials that you may use when preparing the basic disaster and emergency kit, first-aid kit and portable disaster and emergency kit. **The given lists are considering that it may take several days or a week for search and rescue teams to arrive for help in a large-scale**

disaster and emergency. You may keep a shorter list depending on your personal requirements and desires.

1. Water: Keep water in plastic containers. Do not use containers made up of decomposable or fragile (glass) materials. Stock minimum three litres for each person daily. New plastic containers or tanks may poison water. Keep new containers or tanks overnight by adding half a mug of vinegar per 20 litres water. Rinse it well next day and fill with fresh water. Remember to replace your water stock two times a year.

2. Food: Stock nonperishable food that is enough for minimum three days. Prefer those food items which do not require cooling, preparation or cooking. Furthermore, remember to include canned meat ready to eat, canned fruit, dried fruit and nuts and canned vegetables together with a can opener in your disaster and emergency kit. It is recommended to check expiry dates of the food in the disaster and emergency kit once in six months.

3. First-aid Supplies: Prepare separate first-aid kits for your home and car and make the following materials available in them.

	Sterile plasters
	Safety pins in assorted sizes
	Cleaning agent/soap
	Latex gloves (2 pairs)
	Sunscreen
	Sterile gauze pads, 5cm (4-6)
	Sterile gauze pads, 10cm (4-6)
	Triangular bandages (3)
	Sterile roller bandages, 5cm (3)
	Sterile roller bandages, 7.5cm (3)
	Scissors
	Adhesive tape
	Tweezers
	Needles
	Wet wipes
	Antiseptics
	Spare pair of glasses
	Vaseline or equivalent

4. Clothing and Bedding:

	One complete change of clothing and footwear per person
	Sturdy shoe or rubber boots
	Raincoat
	Blanket and sleeping bags
	Woollen beanie and gloves
	Thermal underwear
	Sunglasses

5. Disaster and Emergency Tools and Supplies

	Plastic plates, mugs and kitchen utensils
	Money
	Manual can openers, pocket knife
	Pliers, screwdriver, hammer, drill, crowbar, assorted nails and wood screws
	Shutoff wrench to turn off household gas and water
	Packaging tape
	Compass
	Matches and lighter in waterproof container
	Aluminium foil
	Plastic storage containers
	Signal flare
	Paper, pencil
	Needles, thread
	Medicine dropper
	Adhesive labels
	Safety goggles
	Thick safety gloves
	Whistle
	Thick rope
	Patch kit and a bow of airtight seal
	Disposable dust masks
	Plastic sheeting

5.1 Baby Materials

	Infant formula
	Nappies, wet wipes
	Feeding bottles and sterilization equipment
	Toys and books
	Medications
	Spoons
	Sets of spare clothing/bedding

5.2 Content of Portable Disaster and Emergency Kit

Disaster and emergency info list /other lists
Small torch
Whistle/noisemaker
Water
Extra medication
Copies of prescriptions
Spare pair of glasses
Hearing aids
Sanitary supplies
Safety gloves for wheeling or making your way over particles glass/debris
Paper, pencil or other writing materials

5.3 Content of the Disaster and Emergency Kit

Several blankets
Spare gloves, socks and beanies
Battery cables and usage instructions
Small shovel
Clothing of bright colour that can be used as flag
Mobile phone or radio

5.4 Sanitary Supplies

Toilet paper, paper towel
Soap, liquid detergents
Feminine hygiene products
Personal hygiene products
Plastic rubbish bags, ropes
Plastic bucket with tight lid
Disinfectant or household bleach
Tissues

6. Basic Equipment

Out of the materials listed below, include those that you may need according to your disability in the disaster and emergency kit. Combine them with your disaster and emergency kit according to your requirements and keep them in an easily accessible place. **Check the tools and instruments you use and write type and location of them.**

Glasses:	
Eating utensils:	
Grooming utensils:	
Clothing devices:	
Writing devices:	
Hearing devices:	
Oxygen (flow rate):	
Suction equipment:	
Sanitary supplies:	

Dialysis equipment:	
Urinary supplies:	
Ostomy supplies:	
Wheelchair repair kit:	
Walker:	
Crutches:	
Dentures:	
Monitors:	
Other:	

7. Medications

Prepare your medications according to the suggestions of your physician!

	Insulin
	Prescription drugs
	Prostheses
	Pain relievers and fever reducers
	Anti-diarrheal medication
	Antacids (for epigastric burning)
	Laxatives
	Heart and high blood tension medication

8. Important Documents

Keep these documents in a waterproof and portable container!

	Copies of will, insurance policies, contracts, deeds, stocks and bonds
	Copies of passports
	Work and income
	Account details
	Vaccination records
	Credit card account numbers
	Bank account numbers, names and phone numbers
	List of valuable household goods
	Family records (certificates of birth, death and marriage)

Summarized Checklist

Check the matters dealt with in this chapter with the following list. For convenience, print out a copy of this list and remember to write down the completion date of each action.

	Build a Personal Support Network .
	Make self-assessment by Self Reliance / Capability Analysis .
	Keep yourself safe by means of Self Reliance / Capability Drill .
	Check access to Basic Needs .
	Develop an Evacuation Plan .
	Work on your preparation together with your Support Network.
	Create a Disaster and Emergency Information Card and a Disaster and Emergency Medical Card regarding to your disaster and emergency information. Record these information in a form. Keep a copy of this form at an easily accessible place such as your car, office, emergency kit, wallet and wheelchair.
	Prepare Disaster and Emergency Kits and Supplies . Prepare at least two kits, e.g. Basic Disaster and Emergency Kit and Portable Disaster and Emergency Kit.
	There are 8 Groups of Basic Supplies that you should keep at home. These supplies also contain the supplies that you may use when preparing the basic disaster and emergency kit, first-aid kit and portable disaster and emergency kit.
	Keep the Important Documents in a waterproof and portable container.
	Add the Basic Equipment to your basic disaster and emergency kit according to your disability. Combine them with the disaster and emergency kit according to your needs and keep them in an easily accessible place.

Reference:

Disaster Preparedness for People with Disabilities (2019), New Zealand.

(<https://cdn.boprc.govt.nz/media/456962/3903-disaster-preparedness-for-people-with-disabilities-web.pdf>) (ET: July, 2020)

3rd Step

Planning Disaster and Emergency Evacuation

Mental Impairment and Autism Spectrum Disorder (ASD) are different concepts. Consequently, people with mental impairments and people with ASD are not used as synonym in this Guide. However, some people with ASD are also mentally impaired because of functional mental problems. Especially needs of those people with ASD who also have some functional mental problems associated with developmental disorders in addition to ASD, bear similarities with those of other people with mental impairments. Therefore this Guide gathers disaster and emergency recommendations for people with mental impairment and people with ASD under the same heading. The recommendations which are for the people with ASD who are not mentally impaired are also given under this heading.

As the evacuation of people with disabilities requires a more detailed and extensive approach, the evacuation planning which constitutes a major part of the preparedness stage is discussed under a separate main heading. While the evacuation planning is dealt within the section of standard building evacuation systems for each group of people with disabilities, it is discussed in more detail with respect to fire protection. Thus it aims to teach the people with disabilities about both standard building evacuation measures and special measures concerning fire protection. As the standard building evacuation measures are sufficient for the people with speech impairments, no sub-heading is reserved for them in the chapter concerning fire protection.

General Information

Many people may, at a time of their life, have a temporary or permanent disability that restricts their movements around, inside or outside a building and their abilities to use the physical environment in which they live. Disabilities show themselves in different degrees, and the levels of their skills/competence are important for emergency evacuations. While one person may have multiple disabilities, another one may have a disability with different symptoms. Everyone should have a building evacuation plan, regardless of his or her physical condition.

It is not possible to make a plan concerning every condition for each disaster and emergency case; however, it is important to be prepared for them as much as possible. Matters discussed in the framework of the emergency evacuation plan for people with disabilities will also help all people, organizations or companies

to be prepared to address the people with disabilities as well as others during an emergency. Therefore **Evacuation Planning** contains information for both people with disabilities and their relatives as well as relevant institutions.

Disaster and emergency evacuation planning for people with disabilities essentially contains the following groups of disabilities:

- People with Physical Impairments
- People with Visual Impairments
- People with Hearing Impairments
- Persons with Language and Speech Impairments
- People with Mental Impairment or People with Autism Spectrum Disorder (ASD)
- Chronic Diseases
- Other Disabilities and People with Multiple Disabilities

The Four Elements of Evacuation Information that People with Disabilities Need:

- 1. Notification:** What is emergency?
- 2. Locating the evacuation route:** Where is the evacuation route?
- 3. Use of the evacuation route:** Can I use the evacuation route by myself or do I need help?
 - Myself alone
 - With my supporting device
 - Myself with supporting
- 4. Support:** What kind of support do I need?
 - By whom?
 - What type?
 - Where?

Types of Disabilities

People with Physical Impairments



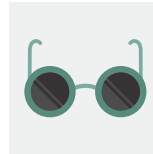
People with physical impairments (bodily/orthopedically) may use one or more tools or equipment such as canes, crutches, a power-driven or manual wheelchair or a three-wheeled cart or scooter, to manoeuvre in the environment they live in. People using such devices encounter significant problems in terms of access and entry/exit. Among typical problems are manoeuvring in the confined spaces, going up or down steps, moving over rough or uneven surfaces, using not sufficiently large toilets and bathrooms, viewing and reaching up the objects at standard height and steps or level differences at the entrance/exit points of the buildings.

This physical impairment category includes people who can walk, but with difficulty or who have a disability which effects their walking. Furthermore, it also includes people who cannot use or coordinate their arms or hands properly. And also people using crutches, canes, walkers, braces, artificial limbs, or orthopaedic shoes also fall into this category.

Among the activities that may be difficult for people with physical impairments are walking, climbing step or incline, standing for long time, have to lie down and fine handwork.

Generally, if a person cannot **have physically access to or use** an element of the standard building exit system such as stairs or door locks or latches, it means that this person has a **physical impairment** that affects his or her ability to evacuate in a disaster and emergency unless alternatives are provided.

People with Visual Impairments



People falling in this category may have partial or total loss of vision. Although some people with a visual disability can distinguish light and dark and colours in sharp contrast, or large prints, they cannot read small prints and fail to distinguish dimly lit spaces or tolerate high brightness. Many people with visual impairments rely on their sense of touch and hearing to perceive their environment.

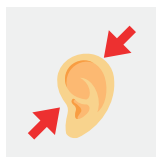
While travelling by public or private transportation or walking, many people with visual impairments use a white cane or are supported by a specially trained service animal.



A person with a visual impairment has a risk of missing a visual warning such as a new obstruction that may occur during an emergency and make it difficult to exit.

Generally, if a person **cannot use some part or element of the standard building exit system or cannot have access to visual information like signage** because that element or information requires vision for use and understanding, then that person has a **visual impairment** that may affect his or her ability to evacuate in a disaster and emergency unless alternatives are provided.

People with Hearing Impairments



People with partial hearing loss mostly use a combination of speech reading and hearing aids that amplifies and clarifies available sounds. Echo, rever-

beration and extraneous background noise from outside may distort transmission of the hearing aid. People who are deaf or hard of hearing and rely on lip reading to get information should be able to clearly see the face of the speaking person. Those who use sign language for communication may be adversely affected by poor lighting. And people who are hard of hearing or deaf may have difficulty in understanding oral communication and receiving notification by equipment that is exclusively auditory, such as telephone, fire alarm, and public address system. There is a risk that a person with a hearing loss or deafness may miss an auditory warning for location of a dangerous situation and, therefore, his or her ability to find the safe exit may be adversely affected.

Generally, if a person **cannot receive some or all of the information transmitted by the**

standard building exit system such as fire alarm horn or audio instructions, it means that person has a **hearing impairment** that may affect his or her ability to evacuate in emergency unless alternatives are provided for disaster and emergency.

People with Language and Speech Impairments



Speech impairments **are preventing a person to use or have access to information or building features** which require speak ability. Speech impairments stem from a

wide range of conditions, but all of them result in loss of ability to speak or to verbally communicate clearly.

As emergency phone systems in shelters, elevators or similar areas connected to standard building exit systems for evacuation require speech ability, they should be considered in the planning process. There may be also **verbal or communicative obstacles**, e.g. asking search and rescue teams for help during disasters and emergency.

People with Mental Impairments or Autism Spectrum Disorder (ASD)



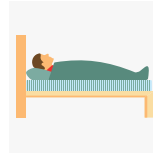
Mental impairments are preventing a person to use or have access to the building features because of the inability to process or understand the neces-

sary information for using those features.

Physical and bodily developments of people with ASD are affected in different levels and the level of effect, shapes the conditions of special needs. Some people with ADS can independently perform all works and adapt to the changes by minor interventions. However, there are also people with ASD who are in need of support considerably where independency is possible to a limited extent, accompanied by heavy cognitive impairments.

All standard building exit systems require a person the ability of processing and understanding the information which ensures a safe building evacuation. In general, if a person is impaired to process or understand such information, he/she is considered as **mentally impaired**, which affects ability of him/her to evacuate safely unless some alternatives are developed for disaster and emergency.

Chronic Diseases and Multiple Disabilities



Some people may have permanent or long-term disabilities and some people may suffer from diseases that affect their normal abilities permanently or temporarily. Bone fractures, disease, trauma or operations may cause problems in usage of the built environment by the affected people for a short time. Cardiac or pulmonary diseases, neurological diseases resulting in lack of coordination and disorders such as arthritis and rheumatism may reduce physical endurance of a person or may cause pains. Reduction of abilities in overall is also experienced by many people as they get older. And overweight people are also discussed under this heading.

People with multiple disabilities are not unusual. A person may, for example, have a combination of visual, speech and hearing impairment.



Although evacuation planning for people with multiple disabilities essentially involves the same process with that for those having a single disability, it **requires developing more steps and creating more options or alternatives.**

Respiratory Failure

People suffering from a respiratory failure can use the components of the exit system in general, but they may have difficulty in evacuating safely due to dizziness, nausea, breathing difficulties, throat blockage or concentration difficulties. For such people it may be important to take rest breaks during evacuation.

Standard Building Evacuation Systems

A standard building evacuation system consists of three components:

1. Evacuation routes
2. Alert/alarm systems
3. Directions for evacuation

Evacuation Route

An evacuation route is a continuous and unobstructed route from any point in a building or facility to the public way.

The components of an evacuation route include, but are not limited to, rooms, corridors, doors, stairs, fire- and smoke-proof divisions, horizontal exits, ramps, exit passageways, escalators, moving walkways, fire escape stairs, portable fire ladders, slide escapes, alternating tread devices, places of shelter and elevators.

If an evacuation route meets one of the following criteria, it is considered as an **accessible** evacuation route for people with disabilities:

- If a person with disability is able to go through

the evacuation route to a public way by himself/herself or by support.

- If a person with disability is able to go through that portion of the evacuation route necessary to reach an area of refuge way by himself/herself or by support.

Area of Refuge

In disaster and emergencies areas of refuge serve as temporary shelters from their effects.

A person with disability must have the ability to go easily from such an area of refuge to the public way unassisted or by support.

Alert/Alarm Systems

The alert systems for the building occupants contain audio alarms and public address systems, but they are not limited with them. Emergency alert systems include ring, horn, speaker, illuminated or audial, tactile or display alerts or a combination of them.

Directions for Evacuation

Directions on and along the accessible evacuation route include signs of different dimensions and sizes, verbal instructions given from one person to other and public address system broadcasted live or automatically.

Today it is also possible to benefit from personal notification equipment. Such equipment can be activated in various ways, including data transfer from the alarm system of the building to the equipment. Data can be displayed in various forms and as printed out. As this technology is relatively new in the market, such type of equipment and system are not discussed here; however, emergency evacuation personnel and persons with disabilities may desire to search them further.

Making an Evacuation Plan for People with Physical Impairments

a. Alert/Alarm Systems



People with physical impairments can hear standard alarms and see any active visual notification instruments (flashing strobe lights) which alert for

hazard and evacuation. There is no need for additional planning or special arrangements for this function.

b. Evacuation Route

• Is There Any Accessible Evacuation Route Available?

If a physically impaired person can easily go, by himself/herself or by support, from the route of evacuation to the public way or to an area of refuge which provides connection to the route of evacuation, it is considered an **accessible** route of evacuation.

If there are differences in elevation, an elevator or another means of evacuation can be used or the person with disability can be carried by others in arms, by a stretcher or evacuation chair or stair descent device.

Special Note - 1

People with physical impairments should know whether there is any accessible route of evacuation in the building they are in.

In case there is no accessible route of evacuation, they should build alternative routes and evacuation methods in their plan.

• Which Evacuation Routes are Accessible Evacuation Routes?

Exits, other than main exit doors that are identifiable as exits definitely and clearly, should be marked by using certified signs that are easily visible from any direction when having access to the exit.

In places where not all evacuation routes are appropriate for use by the people with disabilities, the accessible evacuation routes should be clearly identified by the international symbol of accessibility. Locations of exit signs and directional exit signs are specified by model codes. The signs are usually placed above exit doors and near the ceiling.

Special Note - 2

For physically impaired people, written instructions or a brochure or map should be prepared to show all accessible evacuation routes and all directional signs.

It could be useful to show and give written information about the accessible evacuation routes to the new occupants/employees/students and other regular users of the building/facility/school.

Additionally, simple floor plans should be prepared for the building to show place of and direction to the accessible evacuation routes.

Building security personnel, also those checking entrance locations, should be trained about all accessible evacuation routes of the building and should be able to direct everybody to the nearest accessible evacuation route.

Additional directional signs for exit may be required for clear delineation of the route to the exit. Exit signs and directional signs for exits should be placed in such a way that they will be readily visible and create contrast with their surroundings.

- **Which Routes Lead to the Accessible Evacuation Route?**

Those of the evacuation routes that are **not accessible** should be marked with signs directing to the accessible evacuation routes. For physically impaired people, written instructions or a brochure or map should be prepared showing them the signs and where they are now.

Special Note - 3

When such directional signs are not available, written instructions or brochures or maps should be prepared for the people with physical impairments to show all accessible evacuation routes.

c. Use of the Evacuation Route

- **Can People with Physical Impairments Use the Accessible Evacuation Route by Themselves?**
- **Can People with Physical Impairments Use the Stairs?**

Not all people with physical impairment use wheelchairs. Some mobility-related disabilities prevent people from having access to the building features that require use of arms, hands, fingers or feet. While some physically impaired people are able to go up and down the stairs easily, they may have difficulties in using door locks, latches and other devices.

Special Note - 4

Not all people using wheelchairs or other assistive devices are capable of navigating an accessible evacuation route unassisted. Therefore it is, important to verify that people using any assistive device can travel through the accessible evacuation route to a public way by themselves. Those who cannot manage it without assistance should indicate in detail what kind of support they need in their emergency evacuation plans. In addition, the evacuation plans should include evacuation of the supportive devices of the person with physical disability or alternative means after going out of the building.

If not so, the person with physical impairment rescued from the area of disaster and emergency will lose his his/her ability to move independently.

The evacuation plans for these people should address alternative routes, alternative equipment/devices or private support measure.

- **Are there Assistive Devices for Evacuation of People with Physical Impairments?**
- **Can Elevators be Used?**

Elevators are generally a component of the accessible evacuation route, but some restrictions may be applied for the use of elevators in emergency in some buildings. After the fire alarm is activated, the elevators go down to the ground floor automatically and can be operated only by use of a “firefighter” switch. But this may not valid in the event of non-fire emergencies that require also evacuation.

- **Are Elevators Available?**

As elevators have generally a short vertical travel distance, usually about 3 meters, they are preferred during some evacuations. However, in such case, elevators should be checked to make sure they have emergency power, can operate if power goes out, and if so, how long they can operate. Furthermore, it is important to know whether the emergency power supply of the building is activated automatically or manually.

- **What Other Devices Are Available?**

Some evacuation devices and methods, including stair-descent devices and movement of the wheelchairs, require support of other people (for detailed information, see p.85).

d. Is Support Required?

- **Who Will Provide Support?**

Anybody in the building/office/school:

Anybody can help physically impaired people who can easily go up and down the stairs, but have difficulties in using door locks, latches and other tools/equipment because of restricted movements of their hands or arms. A proper plan taking into consideration such conditions may make a person with disability be aware that he/she should request assistance with respect to a certain door or equipment/device. Remember that everybody may not know all evacuation routes in the building and it may also be required to use routes not much known in an emergency.

Specific persons in the building/office/school:

- Family, friend or co-worker
 - Relative
 - Caretaker



Remember!

Do not use the elevators during a fire! Use the stairs! A good planning and drill are key elements of a successful evacuation.

- Teacher
- Supervisor/inspector
- Building staff
- Floor security officer
- First responder team
- Floor security or evacuation officer
- Firefighters
- Police officers on duty
- Emergency medical officers
- Emergency medical services: emergency medical technicians, ambulance staff

- **How Many People are Necessary to Provide Support ?**

When only one person is required to give support to a person with physical impairments, minimum two, ideally more, people who are ready and appropriate for such support should be

appointed in an applicable plan. A specific person may not be available at any given time for a number of reasons.

If more than one person is necessary to give support to a person with physical impairment, minimum twice the number of the required people who are ready and appropriate for such support should be appointed in an applicable plan.

• **What Kind of Support Will the Designated Person(s) Provide?**

Guidance:

- Explaining the person with physical impairment how and where he/she should get to the accessible evacuation route.
- Escorting the person with physical impairments to and/or through the accessible evacuation route.

Minor physical support:

- Offering an arm to assist the person with physical impairments to/along accessible evacuation route.
- Opening the door(s) in the accessible evacuation route for the person with physical impairments.

Major physical support:

- Operating a stair-descent device.
- Giving help for carrying a wheelchair down the stairs.
- Carrying the person with physical impairments down the stairs.

Waiting for the First Responder Teams

In case of an imminent threat to the occupants of a building, it should be the last choice to wait together with the person with disability for the arrival of the first responders. Although the first

responders do their best to arrive at the scene or place where the people in need of support are located, it is by no means possible to predict how long any certain area will remain a safe shelter under emergency conditions.

This topic should be discussed during the planning stage. It should be clarified how long the person giving support is supposed to wait for arrival of the first responders. It is of great importance because waiting for a time more than required may endanger more lives. A person who is willing to delay his/her own evacuation for giving support to a person with disability in emergency should plan how long such wait might be wise and reasonable.

• **Where Will the Designated Person(s) Start Providing Support?**

From the location of the person with disability in need of support:

Will the person to provide support when the alarm sounds need to go where the person with physical impairments is located? If so, how will he/she know where the person to be supported is waiting?

How Setting the Communication with the Person(s) Providing Support?

- Face to face
- By phone
- Via personal digital assistance equipment
- E-mail
- Visually
- Other

From a specific place designated before:

- Entrance of stairway
- Other

When Will the Designated Person(s) Provide Support?

- Always
- When requested
- Other

Making an Evacuation Plan for People with Visual Impairments



a. Alert/Alarm Systems

In general standard alarms and active visual notification equipment (flashing strobe lights) contain **audible alarms**, therefore it is assured that blind people or people with different visual impairments should hear the alarm or other notifications. Alarm or notification equipment which do not give audible alarm are not appropriate for people with visual impairments.

b. Evacuation Route

• Is There Any Accessible Evacuation Route Available?

If a blind person or a person with different vision impairments can easily have reach from an evacuation route to a public way or an area of refuge that provides connection to the evacuation route, then it is considered as an **accessible** evacuation route.

• Which Evacuation Routes are Accessible, Available and Near for People with Visual Impairments?

The exits should be marked with tactile signs which are located in such a way that they can be easily found by a person with visual impairment from any direction on the way to the exit.

Special Note – 5



People with visual impairments should know whether there is an accessible evacuation route in the building they live.

If there is not an accessible evacuation route, they should develop alternative evacuation routes and methods in their personal emergency evacuation plans.

Special Note – 6



It may be practical to physically take the new building occupants/employees/students who are visually impaired to and through the accessible evacuation routes and to all locations of directional signs along these routes.

In addition, simple floor plans of the building which indicate location and direction of the accessible evacuation route should be available in alternative formats such as single-line, high-contrast plans.

These plans should be provided for the visually impaired employees/users/visitors when they enter the building so they can find the exits in an emergency.

Tactile and Braille signs should be available at the building entrances, stating availability of the floor plans and where to pick them up.

Building security personnel, also those checking entrance locations, should be trained about all accessible evacuation routes of the building and should be able to direct everybody to the nearest accessible evacuation route.

Special Note - 7

The personal evacuation plan of visually impaired people should be developed in appropriate format for him/her and maintained.

This plan should include, but are not limited to, Braille, large type, or tactile characters.

Special Note - 7

Do not use the elevator during a fire!

At the places where not all evacuation routes are usable for people with disabilities, the accessible evacuation route(s) should be marked clearly with the international accessibility symbol. The exit signs and directional signs for people with visual impairments have been specified clearly and definitely in the regulations.

The location of the exit signs and directional signs for people with visual impairments have been specified clearly and definitely in the regulations. They include, but are not limited to, the type, size, spacing and colour of letters for visual characters, and the type, size, location, character height, stroke width and line spacing of tactile letters or Braille characters. For detailed information about the matter, see: <https://aile.gov.tr/media/5615/erisilebilirlik-izleme-denetleme-form-kitaplari.pdf>

• Which Routes are Accessible Evacuation Routes?

In all evacuation routes which are **not accessible**

for a blind person or a person with different vision impairments, there should be tactile directional signs indicating location of the nearest accessible evacuation route. It may be practical to make visual impaired new building occupants, employees or students physically aware of where all accessible evacuation routes are.

Deployment of such signs is usually not expensive. Building owners or authorized persons such as managers or directors, can be informed about what they can do for facilitating the evacuation of people with visual impairments.

For fire safety, there is a new technology involved which is generally called "directional sound". While conventional fire alarm systems are designed more to inform people, they may not have the function of directing them. Directional sound is an acoustic signal in broadband that signifies the position of the exit points and, in this way, assures safety of the people better than conventional alarms. Different sound tones and intensities emitted by the directional sound devices offer cues which are easy to discern for finding the way out. Once people hear the devices, they intuitively follow them and get out of the building quickly. They involve a technology that is worth to be investigated by building service managements.

c. Use of the Evacuation Route

• Can People with Visual Impairment Use the Evacuation Route by Themselves?

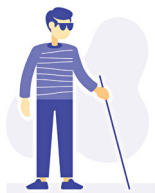
Blind people or people with different vision impairments should easily reach from the evacuation route to the public way or an area of refuge providing connection to the evacuation route in an unassisted way. The personal evacuation plan of blind people or people with different vision

impairments should contain measures that allow them to evacuate independently. However, when there are special conditions such as differences in elevation, other solutions should also be developed for the evacuation of blind people or people with different vision impairments such as use of elevator or use of the stairs by receiving support.

- **Do People with Visual Impairments Need Support When Using the Evacuation Route?**

Use of an accessible evacuation route by blind people or people with different vision impairments by themselves depends on the status of the disaster and emergency and the capability of their movement independently and their level of vision. It is therefore important to verify that a person with visual impairment can travel without support towards and through the exit access and to a public way out of the exit. If he/she cannot, then the personal emergency evacuation plan of that person should include a method for provision of appropriate support.

In general, only one person is sufficient for providing support to a person with a visual impairment. A practical plan should designate minimum two, ideally more, people who are ready and available for support. If only one person is designated, he/she may not be available when required because of illness, vacation, meeting out of office and similar reasons. There-



fore the designation of more than one person with different work and travel programmes provides to develop a more reliable plan.

d. Is Support Required?

- **Who Will Provide Support?**

Anybody in the building/office/school:

Anybody can help people with visual impairments who are able to go up and down the stairs easily, but have difficulties in using door locks, latches and other tools/equipment. An appropriate plan that takes such conditions in consideration may make a person with visual impairment be aware that he/she should request support.

Specific persons in the building/office/school:

- Family, friend or co-worker
 - Relative
 - Caretaker
 - Teacher
 - Supervisor/inspector
 - Building staff
 - Floor security officer
- First responder team
 - Floor security or evacuation officer
 - Firefighters
 - Police officers on duty
 - Emergency medical officers
 - Emergency medical services: emergency medical technicians, ambulance staff

- **What Kind of Support Will the Designated Person(s) Provide?**

Guidance:

- Explaining the person with visual impairment how and where he/she should get to the accessible evacuation route.
- Escorting the person with visual impairment to and/or through the accessible evacuation route.

Minor physical support:

- Offering an arm to assist the person with



visual impairment to/along the accessible evacuation route

- Opening the door(s) in the accessible evacuation route for the person with visual impairment.

Waiting for the First Responder Teams

In general, it is not required for a blind person or a person with different vision impairment to wait for the arrival of the first responder teams. In case of an imminent threat to the occupants of a building, it should be the last choice to wait together with the person with disability for the arrival of the first responder teams. Although the first responder teams do their best to arrive at the scene or place where the people in need of support are located, it is by no means possible to predict how long any certain area will remain a safe shelter under emergency conditions.

- **Where Will the Designated Person(s) Start Providing Support?**

From the location of the person with disability in need of support:

Does the person to provide support need to go where the person with visual impairment is located at the time the alarm sounds? If so, how will he/she know where the person in need of help is waiting?

How Setting Communication with the Person(s) Providing Support?

- By phone
- Via personal digital assistant (including e-mail/special applications converting voice to text)
- Other

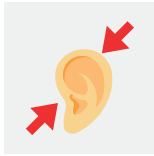
From a specific place designated before:

- Entrance of stairway
- Other

When Will the Designated Person(s) Provide Support?

- Always
- Only when requested
- Other

Making an Evacuation Plan for People with Hearing Impairments



a. Alert/Alarm Systems

Visual Equipment for Fire Alarm Systems

People with hearing impairments cannot hear the alarms and announcements for danger and evacuation. Standard alarm systems in new buildings have to include audio and flashing strobe lights as visual alarm equipment according to the applicable regulation; however, as the codes are not retrospective, many buildings are not equipped with them.

TTS 12937 “Regulation on Fire Protection of the Buildings”, 2007; audio and visual alarm equipment, ARTICLE 81:

“(3) Evacuation alarms have to be made both audible and visual other than the following exceptions: Use of visual alarm equipment is not obligatory in the places where the presence of people with hearing impairments is not possible.”

In this legal regulation, the statement “where the presence of people with hearing impairments is not possible” seems to contradict with the target to incorporate all people with disabilities together with other people in all aspects of social life from a modern and inclusive perspective. The goal is to make all areas accessible by eliminating the areas where presence of people with disabilities is not possible. In these areas, for example military or hazardous chemical areas, an explosion that may occur in or around the facilities may cause temporary loss of hearing as well and therefore also require a visual alarm equipment for the emergency evacuation. The related regulations should be looked over from this point of view.

Flashing strobe lights are required only for the fire alarm systems and they alert only about fire (alert system is also obligatory at the places where fire alarm button is obligatory). **Additional information which is given via voice systems for specific types of emergencies such as adverse weather events or directing people to use a specific exit is not accessible for people with hearing impairments.**

It is particularly important for people with hearing impairments to know that notification systems are available. Furthermore, it is also significant for them to know those emergency cases which will activate visual notification system and those which will not. In order that the people with hearing impairments can get all information they need for evacuation in time, alternative notification methods should also be included in the evacuation plans for disaster and emergency. These are consisting of flashing light warning systems or vibration paging systems. Announcements and alerts made by help of these systems are sent as a message to the cell phone of the disabled person.

Devices or Methods for Notification of Other Emergency Cases

Below there is a partial list of emergencies that should be considered for development of the alternative alert systems:

- Natural events:
 - Storm (hurricane, tornado, flood, snow, lightning, hail)
 - Earthquake (even though a related system may provide only just a few seconds of notification, it may reduce anxiety and prevent panic)
- Human-made events (robbery, hostile acts,

random violence, etc.)

If a person with hearing impairment spends most of his/her time in a certain place, e.g. home/office/school etc., installation of a floating-text board in the workplace will provide necessary warning in emergency.

Today it is also possible to use personal notification devices. These devices can be activated in different ways, including data transmission from the building's alarm system to the device. The information can be displayed in various forms and outputs.

Communication via e-mail and TTY is among alternative methods to alert people with hearing impairments.

Another alternative is the use of television broadcast in public and working areas with "optional subtitle" feature specific to people with hearing impairments.



Special Note – 9



Scrolling reader boards are becoming more common and are being applied in creative ways.

In emergency, they can flash to attract attention and provide information about type of the emergency.

b. Locating the Evacuation Route

• Is Prior Information Required about Evacuation Route(s)?

Once properly notified about an alarm or specific instructions via appropriate visual notification devices, people with hearing impairments can use any standard evacuation route to get out of the building. The important point is, that the standard alarm systems giving evacuation notice should contain active visual notification equipment (flashing scope strobe lights, scrolling board messages, etc.), thus making them accessible for people with hearing impairments.

• Is It Necessary to Identify the Available or Nearest Evacuation Route?

In general: Simple floor plans of the building which indicate location and direction of the accessible evacuation route should be available in alternative formats such as single-line, high-contrast plans. These plan should be given to the employees/users/visitors at the entrance of the building, so that they can find the exits in an emergency. Tactile and Braille signs should be available at the building entrances, stating availability of the floor plans and where to pick them up.

Building security personnel, also those checking entrance locations, should be trained about all accessible evacuation routes of the building and should be able to direct everybody to the nearest accessible evacuation route.

- **Is It Necessary to Identify the Routes**

Having Access to the Evacuation Routes?

After alerted by the active visual notification equipment (flashing strobe lights), people with hearing impairments can read and follow standard exit and directional signs.

c. Use of the Evacuation Route

In general: Elevators should have both a telephone and an emergency signalling device.

People with hearing impairments should know whether the phone is restricted to voice communications and where the emergency signalling device rings—whether it rings or connects to a line inside or outside the building— and who will respond it.

d. Is Support Required?

Some people with hearing impairments may need support in the areas dimly-lit or not lit at all because their balance is adversely affected when there are no visual references.

Making an Evacuation Plan for People with Speech Impairments

a. Alert/Alarm Systems



People with speech impairments can hear standard alarms and voice announcements and can see active visual indicators alerting against danger and need of evacuation.

No additional planning or special arrangements are therefore required for this function.

b. Locating the Evacuation Route

• Is Prior Information Required about Evacuation Route(s)?

Once alerted by the alarm system of the building, people with speech impairments can use any standard evacuation route out of the building.

• Is It Necessary to Identify the Available or Nearest Evacuation Route?

In general: Simple floor plans of the building which indicate location and direction of the accessible evacuation route should be available in alternative formats such as single-line, high-contrast plans. These plan should be given to the employees/users/visitors at the entrance of the building, so that they can find the exits in an emergency. Tactile and Braille signs should be available at the building entrances, stating availability of the floor plans and where to pick them up. Building security personnel, also those checking entrance locations, should be trained about all accessible evacuation routes of the building and should be able to direct everybody to the nearest accessible evacuation route.

• Is It Necessary to Identify the Existing or Nearest Evacuation Routes?

After alerted by the alarm system of the building, people with speech impairments can read standard exit and directional signs and thus find and follow evacuation route.

c. Use of the Evacuation Route

In general: In the standard evacuation systems of a building, only the emergency phones in the elevators require ability of speech. Elevators should have both a telephone and an emergency signalling device. People with speech impairments should know whether the telephone is restricted to voice communications and where the emergency signalling device rings — whether it rings or connects to a line inside or outside the building— and who will respond it.

d. Is Support Required?

Some people with speech impairments may need support with respect to use of the aural communication equipment. In this respect, there are applications that can be installed in the cell phones and convert the written text into audio text.

Making an Evacuation Plan for People with Mental Impairments or ASD (Autism Spectrum Disorder)



Mental impairments may prevent a person to use or get access to building features, because he/she could not process or make out the information necessary to

use or get access to such features. Mental impairments stem from a wide variety of spectrum disorders, but all of them may cause reduction in the ability of processing or understanding the information or situation.

The determinant is the level of being affected by the mental impairment. People with mental impairment diagnosis who can read and write, may acquire skills concerning evacuation through qualified practices and maintain such skills. And some others may need support by at least one person in each stage of the evacuation depending on the level of their mental impairment.

Mental impairment is observed in about 80% of people with ASD. Hence, this Guide deals with people with mental impairments and people with ASD together. However, there are some characteristics that differentiate people with ASD from people with mentally impairments, e.g. limited, repetitive interest and behaviours and self-stimulating behaviours and common attention problems, etc.

Another important thing regarding ASD should be underlined, that the majority of these persons have sensual sensibilities to “chaotic” atmospheres of disasters and emergencies like earthquake and fire.

They may make them excessively anxious, cause behavioural problems and create problems such as temper tantrum or resistance to

evacuation. It is therefore recommended, that frequent practices should be done particularly with the persons with ASD or they should participate in the evacuation drills in order that they become accustomed to such situations and adapt themselves easily to the evacuation process. In this way, they will both learn easily and permanently about behaviours they should show under such conditions, and any sensory problems and other behavioural problems that may arise from other reasons or also the resistance to evacuation may be reduced, making it easy for them to adapt to such situations.

For safe evacuation, all standard building emergency exit systems require the ability of processing and understanding the information. Following methods are recommended for people with mental impairments or ASD to overcome the obstacle in question:

- Preparation of illustrated books of drill procedures.
- Colour-coded fire doors and exit ways.
- Implementation of a “buddy system” where the friends take care of each other.
- Use of one-to-one teaching methods.

a. Alert / Alarm Systems

Mentally impaired people or people with ASD can hear the standard alarms and see the active visual notification devices that give hazard and evacuation alerts. Even though the ability of a person with mental impairments or a person with ASD to recognize and understand a fire alarm or other emergency alert systems should be checked. If a person with mental impairments or a person with ASD cannot recognize and understand alarms, plans containing necessary support should be developed in this respect.

As some persons with ASD are also excessively sensitive to high sounds, they may need more special support and plans for their reactions to the alarm signals in emergency.

b. Locating the Evacuation Route

The ability of a person with mental impairments or a person with ASD to find and use the exits should be checked. If a person with mental impairments or a person with ASD cannot find or use the exits without assistance, plans containing the necessary support should be developed.

In general: Simple floor plans of the building which indicate location and direction of the accessible evacuation route should be available in alternative formats such as single-line, high-contrast plans. These plan should be given to the employees/users/visitors at the entrance of the building, so that they can find the exits in an emergency. Tactile and Braille signs should be available at the building entrances, stating availability of the floor plans and where to pick them up. Building security personnel, also those checking entrance locations, should be trained about all accessible evacuation routes of the building and should be able to direct everybody to the nearest accessible evacuation route.

• Is It Necessary to Identify the Routes Leading to the Evacuation Routes?

The ability of a person with mental impairments or a person with ASD to find the exits should be checked. If a person with mental impairments or a person with ASD cannot find the exits without assistance, plans containing necessary support should be developed.

c. Use of the Evacuation Route

The ability of a person with mental impairments or a person with ASD to use the evacuation route should be checked. If a person with mental impairments or a person with ASD cannot use the exits without assistance, plans containing necessary support should be developed.

d. Is Support Required?

• Who Will Provide Support?

In general, only one person is necessary to support a person with mental impairment or a person with ASD. A practical plan should designate minimum two, ideally more, people who are ready and available for support. If only one person is designated, he/she may not be available when required because of illness, vacation, meeting out of office and similar reasons. Therefore the designation of more than one person with different work and travel programmes provides to develop a more reliable plan.

Specific persons in the building/office/school:

- Specially trained or knowledgeable persons
- A person known by the person with mental impairment or the person with ASD

What Kind of Support Will the Designated Person(s) Provide?

- Making the person with mental impairment or person with ASD recognize the emergency and understand that the building should be evacuated.
- Accompanying him/her to and along the emergency exit.

Where Will the Designated Person(s) Start Providing Support?

- At the place of the person in need of support
- At a special place designated before
 - Entrance of stairway
 - Other

When Will the Designated Person(s) Provide Support?

- Always
- Only when requested
- Other

How Setting Communication with the Person(s) Providing Support?

- Face to face
- By phone
- Via personal digital assistance equipment
- E-mail
- Visually
- Other

Evacuation of Service Animals

Although it is not widespread in our country, the service animals provide great support to people with disabilities in their daily life.

There are service animals individually trained or rescue dogs or similar animals that provide support to the people with disabilities. While the service animals are mostly trained to give support to the people with visual impairment, they are also trained to warn a person against strange voices at home or office, pull the wheelchair, gather up articles around or give support to keep the balance of a person in disaster and emergency conditions.

Mostly no licence or certificate is given by the government or local administrations for the service animals. Service animals are generally allowed to accompany the people with disabilities in the public and private facilities, facilities of the government and local management and offices (including shelters, hospitals and emergency vehicles). However, there is no legislation yet about this matter in our country.



A service animal may not be admitted into a facility only under the following rare and extraordinary conditions:

- If the behaviour of a service animal pose a threat for health and safety of the other people;
- If the presence of the service animal considerably affects nature of an establishment or effectiveness of an event organized by government or local administration;
- If the service animal acts aggressively against the visitor or other employees or gets out of control and causes “undue hardship” for an employer.

Even under these conditions the public facility, state or local municipality or employer must allow a disabled person without the service animal to take advantage of its goods, services, programs, activities, and/or equal employment opportunities (and if required under other conditions).

A disabled person having a service animal should inform the emergency management personnel about his/her specific preferences concerning the evacuation of the service animal and how it should be treated.

References:

Emergency Evacuation Planning Guide For People with Disabilities (2007), NFPA, USA. (https://www.preventionweb.net/files/8881_EvacuationGuide.pdf) (ET: July, 2020)

Kurt, O. (ed.) (2019), *Özel Gereksinimli Bireyler İçin Afet ve Acil Durum Yönetimi*, T.C. Anadolu Üniversitesi Yayını.

Checklists for Evacuation Planning

The following checklists will help you make sure to what extent you are prepared to disaster and emergency evacuation planning or which deficiencies you have to complete.

Your personal data:

Full Name:

Primary Location:

Building (home, office, etc.):

Primary Phone:

Address:

Cell Phone:

Floor:

E-mail:

Service animal: ☐ Yes ☐ No

Alert/Warning Systems Checklist

Type of Emergency	Notification Method or Equipment
• Fire:
• Earthquake:
• Flood:
• Storm:
• Attack:
• Other (state):

	Yes	No	N/A	Comments
Are there emergency warning equipments (alarm, etc.) appropriate for this person?				
Does the person know location and understand meaning/function of each emergency warning equipment/system?				
Does the person know how the alarm will sound in emergency (manual pull box alarms, public address systems, radio, telephones)?				
If emergency cases are announced by phone, are the emergency call numbers near the phones, on the notice boards of the employees or at a well seen place?				
Are there any means of notification the emergency for a person with hearing or speech impairments?				
If the communication system is used also as an alarm system at the same time, do all emergency messages have priority above the non-emergency messages?				
Is there any specific signal (sound, light, title) which signifies the emergency message?				

Locating the Evacuation Route

	Yes	No	N/A	Comments
Is there an accessible way out?				
Where is it? (List all and indicate the nearest one.)				
Is there an assembly area outside the building?				
Is the accessible evacuation route clearly marked to show the direction to be followed for going out of the building or going to another space in the building?				
If a person going through a door or turning a corner that could inadvertently be directed into the path of a moving vehicle, is there a safeguarding device with a warning sign in place?				
If the stairs on the evacuation route go to any place outside the building, are there any doors, partitions or other leading means showing the correct exit out of the building?				
Do the doors connecting the rooms to the evacuation route have appropriate clearance for manoeuvring?				
Can the doors opened easily?				
Do the exterior evacuation routes (balcony, porch, gallery and roof) meet the previous four requirements?				
Are there any railings to protect the open side of the walk paths along the exterior evacuation route?				
Does the evacuation route contain a smooth, sound and considerably straight movement surface?				
Do exterior evacuation routes continue without branching and heading away from the public way?				
Is each exit marked in different ways (visual, tactile, Braille) and with the sign "EXIT" clearly?				
Does each door or passage that can be mistaken as an exit have any "NO EXIT" sign or any different warnings (visual, tactile, Braille) showing the actual use of it?				
Are there appropriate signs in sufficient number along the evacuation routes to show how to reach the nearest exit?				

	Yes	No	N/A	Comments
Do the signs show the access direction clearly and in different ways (visual, tactile, Braille)?				
Are the brightly lit signs, images or objects in or near the visual angle so arranged that they do not attract or block attention particularly of the persons with low vision?				
Are all evacuation routes free of any obstacles (including furniture and equipment) for safe emergency evacuation of all people in the building?				
Are people prevent from travelling through a space/room like a restroom that can be locked?				
*Can all interior doors other than fire doors be easily opened from inside without use of any key, tool or special knowledge and require less than 2.5kg of force to open and set the door in motion?				
*Are any exit signs not obstructed or not concealed in any way, particularly for people with visual impairments who need to find and feel the sign?				
*Are the exit doors free of any objects that obstruct visibility of the exit signs or cover any visual, tactile or Braille signs?				
*Is the evacuation route made clear of obstacles caused by construction or repair?				
*Is the clear height of the evacuation route minimum 2 meters at all points?				
*Are subjects such as ceiling ventilators and wall cabinets prevented from reducing the minimum height and width of the evacuation route?				
*Are accessible evacuation route at least 80 cm in width for any segment less than 60 cm in length or at least 90cm in width for all segments 60 cm or longer?				
*Is each accessible evacuation route a fixed part of the facility?				

* Questions addressed to organizations and enterprises with disabled users.

	Yes	No	N/A	Comments
*If the evacuation route is not completely straight, are occupants provided with appropriate stairs or a ramp?				

Public road to which the evacuation route of the building has access:

	Yes	No	N/A	Comments
Is it directly outside or does it consist of a street or passage?				
Has it access to an assembly area and from there to another public road?				
Is it an open area with access to the public way?				
Has it large enough streets, walkways or open areas to accommodate all building occupants likely to use the exit?				

Type of Support Needed

	Yes	No	N/A	Comments
Can the person evacuate himself-herself by help of a tool/equipment or by support?				
With what kind of device/tool?				
Where is the device/tool or support?				
Does the person need support to evacuate?				
What do(es) the supporter(s) need to do?				
Have the practices been completed?				
Where will the supporter(s) meet the person in need of support?				
When will the person in need of support contact with the supporter(s)?				

Source of Tables:

Emergency Evacuation Planning Guide For People with Disabilities (2007), NFPA, USA.
(https://www.preventionweb.net/files/8881_EvacuationGuide.pdf) (ET: July, 2022)

Number of Supporters Required?

How many supporters are required?

How will the supporter(s) be contacted in an emergency?

Full Name	Telephone	Cell	Comments
Volunteer 1			
Volunteer 2			
Volunteer 3			
Volunteer 4			
Volunteer 5			
Volunteer 6			

Service Animals

	Yes	No	N/A	Comments
Has the person discussed with emergency management personnel about their preferences on how to evacuate and treat the service animal?				
Has the person thought under what circumstances a decision may have to be made for leaving his/her service animal behind?				
What is the best way to support if the service animal becomes hesitant or disoriented?				
Do the first responders have a copy of the detailed information about the service animal?				
Where are extra food and supplies of the service animal kept?				

Fire Protection Evacuation Methods for People with Disabilities

People with Physical Impairments



This classification can include many people. Problems related to this group may also be significant for people suffering from heart disease or asthma.

Evacuation options preferred for people with physical impairments are horizontal evacuation out of the building, horizontal evacuation to another fire-proof section or vertical evacuation by means of elevator reaching to the safest place outside the building. For people with disabilities these are the most preferred options. This group also includes those persons who can use the stairs or can walk longer distances, especially if the evacuation method has break times.

Another measure that facilitates the evacuation could be specially designed stair handrails for wheelchair users. And information about location of the fire may also be useful to prevent selection of an incorrect starting point or eliminate any necessity to change direction during evacuation.

Remember that it may not be possible for people falling into this category to go out of the building in two or three minutes. We recommend that they should be informed about the evacuation routes having protection against fire and smoke and about those parts of the building which have fire-proof sections.

Knowing/learning the fire protection measures in the building, will allow the people with disabilities to gain time they need for evacuation by themselves or by support.

I. Wheelchair Users

People with physical impairments in this group are the ones who are most under risk during emergency evacuations. However, persons who regularly use their wheelchairs may help themselves or facilitate their independent evacuation by moving slowly during their evacuation. It is very important asking questions to persons with disabilities in a sensitive way which allows to create the best evacuation plan.

The most preferred evacuation method by people with physical impairments is horizontal evacuation to the outside of the building or vertical evacuation using an evacuation elevator. If these options are not available or functional, it may be required to carry the disabled person down or up the emergency stairs. The carriage of such a person up/down the stairs can be realized with different methods shown below.

Special Note

Assumptions should not be made about the abilities of wheelchair users. Ask them about what kind of support they need in order to get information about their abilities to safely evacuate out of the building.

Carry-Down Procedures

a. Evacuation Chairs

Evacuation chairs look similar to a deckchair with skis and wheels underneath, which slide down the stairs after placed on the stairway. Wheels allow movement on flat surface, but they are not suitable to take long distances.

Using an evacuation chair requires the support of one or two persons who have been trained and practiced in this respect. Persons with disabilities may not like to use this chair and it is also not possible for each wheelchair user to be transferred to or get sit in the evacuation chair. Therefore evacuation chair should not be considered as automatic solutions for wheelchair users in emergency cases.

Evacuation chair works well when the wheelchair user and his/her assistant are well-trained in this respect and accustomed to this equipment.

When it is purchased, it should definitely include an appropriate training system. And, additionally, regular exercises should be made.

In general, disabled persons are not required to take place in these processes, but some may request to make practice regarding carriage with the evacuation chair. Rather than including the disabled person in evacuation chair using practices, it may be more appropriate that in this matter trained people make practice themselves one by one.



This will enhance their self-confidence with respect to use of the equipment as well. **Using an evacuation chair may create risk of injury for a disabled person; therefore it is the best to limit the use of these chairs for people with disabilities to real events.**

b. Carry-Down the Disabled Person in the Own Wheelchair

There are different methods for getting a disabled person down the stairs by using his/her own wheelchair: The wheelchair can be carried down by two, three or four persons, holding it at certain points in the corners. And the team may lift the wheelchair in this way and carry it upstairs or downstairs. Most wheelchair users may show this method to the persons who will give him/her support.

c. Carry-Down the Disabled Person in an Office Chair

This method is applicable when it is not possible to carry down the disabled person, for example when he/she uses a big battery-driven wheelchair.

Any robust office chair is appropriate for this method, but chairs with armrests should be preferred. The method of carry-down is same of the wheelchair.

d. Carry-Down the Chair on the Wheels

It is possible to carry down some wheelchairs by tilting them, almost without any weight. One or two persons hold the chair at a fixed place on the back of the chair and, by help of the weight of the person being carried, drive the wheelchair down the stairs.

Important Questions



When writing a plan with a person who has a physical impairments or uses either an electrically or manually powered wheelchair, following information should be obtained:

- On which routes or evacuation routes are handrails available?
- What is the distance of traveling along certain routes?
- Where are the fire-resistance sections located in the building?
- Are there evacuation chairs available?
- Which of the stairs are equipped with handrails and at which side of the stairs take they place?
- Is it possible to use the elevators and sections having elevators?
- Which support can the personnel provide?

Questions to Ask a Person with Physical Impairments



- Can you walk down the stairs without support/with support?
- How long can you walk without support?
- Are you able to slide down the stairs?
- How many flights of stairs can you descend?
- Would the number of flights you descend increase if you are supported?
- How many persons should support you?
- How many times should they stop to give a break?
- Would handrails make it easier for you to evacuate?
- Are there stair landings or other supports along the evacuation routes that may be helpful for you?
- To what degree may smoke and similar factors affect your disability?
- Is your wheelchair a battery-driven or manual one?

Some wheelchair users can perform this manoeuvre without support, but they are few in number and getting down the stairs in this way is practical only for short stair flights.

None of the techniques explained above are appropriate for use without receiving proper training. All carry-down techniques require risk assessment as well as professional operation and carriage training for the operators.

Developing an evacuation plan needs to consider what is practical and achievable under unusual circumstances, rather than what is possible during normal daily activities.

Upon completion of this phase, some persons will decide that they may manage to evacuate by themselves. And some others will appreciate that they need support of one or more person.

II. Users of Battery-Powered Wheelchairs

People with severe physical disability: People with disabilities using battery-powered wheelchairs may have more restricted movement capabilities compared to the ones using manual wheelchair. However, as there are exceptions to this rule, it is important to consult to the disabled person himself/herself in this respect.



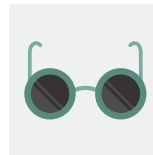
People with disabilities taking place in this group may need more support to evacuate from the building. It would be a sensible act for the authorized personnel or building managers to facilitate the independent evacuation of all groups of disabled people and keep available sufficient number of competent personnel to give support to this group.

It would be not realistic to expect this group of people to be able taking for their chair —considering their weight and size— with them. If there is no elevator appropriate for their evacuation they will have to leave their wheelchairs in the building. This fact will require other methods, for example an evacuation chair and similar equipment to carry them down.

There are also other types of mechanical equipment available for carrying people with physical impairments down and up the stairs; however, if you consider using such evacuation equipment you should take into account the timing and the possibility of preventing the evacuation of other people.

If four people are required to carry down the disabled person, it is very important that the width of the stairs allow the entire team to move free and safe.

People with Visual Impairments



For the evacuation of people with visual impairments correct marking and other directional signs are very helpful. If the physical conditions are sufficient, they will have no difficulties to leave the building. However, depending on the severity of the disaster and emergency, the evacuation conditions may be more challenging. In such cases the effect of a higher visual level on the evacuation process may be much more different or contrary than expected. As blind people or people with different visual impairments do not need a source of light, they may even more advantageous.

Therefore, a direct proportion between the level of vision and easy movement should not be considered and all measures should be taken to facilitate the evacuation of blind people or people with different visual impairments.

Some organizations cannot provide special orientation information like tactile signs or audio signals. In such cases, it is possible to take advantage of the existing items in the building, which will make it easier for people with visual impairments to evacuate themselves. These may consist of building design items including bright and contrast colours, handrails on the emergency stairs and step edge markings, and flooring in contrast colours or different tissues. The presence of such orientation cues reduces the need of blind people or people with other visual impairments for support.

However, people with visual impairments should be made aware of the presence of all these precautions on basis of their personal emergency evacuation plan. In places where such orientation information is lacking, personnel support will be required for evacuation out of the building.

Orientation Information

Improving the circulation and orientation may provide great advantage. Evacuation routes/ways which are connected reasonably to the emergency stairs, will benefit not only the people with visual impairments, but all building users.

Correct identification by colour and accessible signs will help blind people or people with different visual impairments to use the building. The widespread use of these systems extending to the evacuation routes helps to reduce the need for support during evacuation.

Blind people or people with other visual impairments may not easily find the exit signs and discern the direction to exit from the building, but they may remember the paths on the entrance route to the building. Using the evacuation routes as a part of the general circulation routes in the building may allow blind people or people with other visual impairments to recognize these routes better and thus have more options during emergency evacuation.

Important Questions



When writing a plan with a person who has a visual impairment, following information should be obtained:

- What type of alarm system is available?
- Are the evacuation routes marked clearly?
- Is sufficient information available for orientation?
- Are the fire protection instructions been prepared in proper formats?
- Are the step-edges of the evacuation stairs marked properly?
- Have the escape stairs handrails?
- Have they closed risers?
- Are there open and steel external evacuation routes?

Questions to Ask a Person with Visual Impairment



- Do you work alone in the building?
- Do you work out of working hours?
- Can you hear the alarm?
- Do you know the location of all the evacuation ways/routes?
- Can you follow these evacuation ways/routes without support?
- Do you work as a team in an open office?
- Can you read the evacuation instructions?
- If you cannot, in which format should they be?

Fire Protection Instructions

People with visual impairments cannot read the fire emergency instructions in most buildings, because they are not provided in proper fonts. Proper instructions should be prepared by using Braille or in large print or on audio-tape. Preparing tactile maps of the evacuation routes and providing orientation training to the personnel with visual impairments working in the building, may assure a higher awareness about the evacuation options.

Staff Responsibility

As a general principle, the staff should be well-trained to ensure safe evacuation of all employees/users/visitors, disabled or not, out of the building. This is also the safest method for occasional users as well.

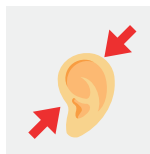
Keeping the Evacuation Routes Safe

Some other measures can be applied to make the evacuation of people with visual impairments easier. Open raisers may be difficult for them, therefore there should be no stairways with open raisers on the evacuation routes.

If such stairways are present, support should be provided during the evacuation or certain adaptations should be performed to make the stairs safer. Using another stair may be also an option.

If the office furniture or equipment is rearranged and escape routes are affected, these changes should be documented and people with visual impairments in the building should be notified about them.

People with Hearing Impairments



People which have hearing impairments or who are deaf should be aware that there is an emergency evacuation. If there is only an audible fire alarm system

available, they may not hear the alarm or the message announced by the public address system. However if there are sound enhancement systems in the building, the message can be transmitted via this system, e. g. by a hearing loop or radio paging receiver.

The most preferred options to alert people with hearing impairments about an emergency situation and evacuation are to add warning lights as part of the fire alarm system and to use paging systems. If it is not possible to provide them, there are other appropriate equipment for the transmission of this information.

Important Information

When writing a plan together with a person who has hearing impairments or who is deaf, it should be so established that the following equipment and support are available:

- Visual alarm system
- Text messaging system
- Office intranet
- Telephone network – text phone
- Vibrating pager
- Team members
- Fire wardens
- Friend support/buddy system
- Warning lights

For ensuring that they are working, all pagers and other equipment should be checked regularly.

Personnel Training

If another personnel is responsible for alerting people with hearing impairments or who are deaf to leave the building, they should be trained in hearing impairment/deaf awareness. In general floor wardens are checking the building to be sure that no one is left behind in the floors. These personnel can be trained to understand the attitudes of people with hearing impairments that may not hear the alarm.

Such cases are usually observed in single offices, libraries, toilets or rest rooms. Fire safety wardens should not be content with a vocal call and also be trained to check physically all areas for which they are responsible, but only if these areas are safe.

If a person does not act reasonably during the process of evacuation, the responsible personnel should be capable to discern that the person in question might not have heard the alarm. Most of the time, it is not possible to get response by shouting louder. It is required to go directly to that person and explain him/her what happened by means of signs or by writing a note or showing an instruction written previously.

Fire Protection Instructions

Not all people with hearing impairments may know Turkish. It is important to make available a fire protocol written in simplified Turkish and translated to the required languages. In addition, for the people in this group, it may be useful to support the written information by symbols. People with hearing impairment may prefer that these instructions are explained to them by a Turkish Sign Language interpreter.

When writing a plan for people with hearing impairments, there are additional subjects to be taken into consideration.

Lone Working

Care should be taken to inform people with hearing impairments about the emergency, who work alone in the building. The availability of a visual alarm system or vibrating pager system is important for such cases.

This is also important for a person with hearing impairment who is working out of hours and who has no hearing person around to alert him/her about any possible emergency evacuation. Furthermore it should be remembered that evacuation may be possible also for cases other than fire emergency.

The working hours or working flexibility of the staff with hearing impairments should not be restricted because of insufficient conditions for safe evacuation. Such restrictions, if made without full consideration of reasonable adjustments, may cause discrimination.

Important Questions



When writing a plan following information should be given to people with hearing impairments:

- About available systems alerting them of an evacuation; for example like warning lights, paging equipment, personal communication, etc.
- About how to use fire alarms; how to raise the alarm, how to communicate with the control centre, etc.
- Ensure that people with hearing know the evacuation processes; for example where to go, alternative routes and where to report to after the evacuation, etc.

Questions to Ask a Person with Hearing Impairment



- Do you work alone in the building?
- Do you work out of hours?
- Do you work as a team in an open office?
- Do you have a special message (SMS) number for emergency situations?
- Do you have an e-mail address?

People with Mental Impairments or Autism Spectrum Disorder (ASD)



People with mental impairments often have problems in understanding what is happening during an evacuation or they have not the same perception of risk as non-disabled people.

Some people with mental impairments may also have other disabilities; some may have also mobility restriction and some may have also hearing or visual impairments. Some people with mental impairments may move slower than the main flow of people and therefore they may need a slow and fast lane in the escape stair (if the stairway allows it).

Orientation Information

Other useful tools are orientation information and colour coded evacuation routes. Performing drills along the evacuation routes and repeating such drills in regular intervals may significantly reduce the requirement for personnel support. It is essential for the persons in this group to perform drills, particularly in cases when one person is responsible for many persons, e.g. in the classrooms. Drills which are repeated in regular intervals may reduce occurrence of behavioural problems that may be observed with these persons and prevent safe evacuation. Use of the evacuation routes/ways also for general circulation will be helpful.

Fire Protection Instructions

It may be required to read out and explain the evacuation plan to the persons in this group. Video-assisted explanation of what should be done in emergency may also be useful.

Special Note



Instead of asking what people with mental impairments or people with ASD need, it may be more accurate to ask what they understand and to develop a plan on how they are able to find the evacuation routes

And visual explanation of the evacuation route/way may also be helpful.

Other Factors

Some people with mental impairment may move slower than the main flow and therefore they may need separation of the escape stairs in form of slow and fast evacuation lanes.

It is important to know that not each person with mental impairment has a carer or assistant with him/her. Instead of assuming presence of a carer or assistant, always the person with mental impairment himself/herself should be informed about how he/she should leave the building. It may not be possible to explain this to a person with an impairment that adversely affects his/her orientation skill. The personnel should be made aware of such situations and they should sensitively help the persons who are lost or do not know what to do during the evacuation process.

If Able to Answer: Questions to Ask a Person with Mental Impairment or with ASD



- Do you work alone in the building?
- Do you work out of hours?
- Do you recognize the alarm sound?
- Do you know where to escape when you hear the alarm sound?
- Do you work as a team in an open office?
- Can you read the evacuation instructions? Can you understand them?
- If you cannot, in which format should they be?

Important Questions



If a person with mental impairment or ASD cannot answer this question himself/herself, then the information should be get by asking these questions to the relatives or carers of him/her when writing a plan:

- What type of alarm system is available?
- Are the evacuation routes clearly marked?
- Is there sufficient orientation information?
- Are fire instructions provided in accessible formats?
- Are there step edge markings on the escape stairs?
- Are there handrails on the escape stairs?
- Are two different lanes for flow of people on the stairs? Are the stairs wide enough to allow this?
- Are the risers closed?
- Are there open and steel external evacuation routes?

Other People with Special Requirements

Do not expect that a person because of his/her disability will need or ask for a personal disaster and emergency evacuation plan. If they are informed, some will realize that they can leave the building without support. Other people who cannot be considered as disabled should also be given the opportunity to request an evacuation plan. All the personnel (disabled/non-disabled) in a building should have the opportunity to express their personal requirements and they should be assured that if they need support it will be provided to them. Service providers should show an approach that makes it possible for people to ask for a special evacuation plan if needed and those who receive this service should not think that their relations with their employers will be adversely affected due to these demands and needs.

Persons having epilepsy may fall into the classification of “unknown requirements”; but they are not the only ones who have unknown requirements. In a disaster and emergency, many people are capable to go out of the building without support, whereas fire scenarios generally assume that at the time of the fire alarm a person with epilepsy may have a seizure and get down in an area where he/she is alone (e.g. toilet or warehouse). But this is unlikely and as fire wardens check each floor thoroughly during evacuation as a usual procedure, they will also be able to detect such a rare incident. For this reason, as well as removing real barriers that make the life of people with disabilities difficult, it is also important not to create imaginary barriers that keep them away from work and social life due to unrealistic assumptions.

Reference:

Fire Safety Risk Assessment, Means of Escape for Disabled People, UK.

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/886446/9446_Means_of_Escape_v2_.pdf) (ET: July, 2020)

(Open Government Licence: <http://nationalarchives.gov.uk/doc/open-government-licence/version/3/>)

4th Step

Disaster and Emergency Drills

Comprehension of severity and seriousness of a disaster and emergency, whether in office or school or at home, is only possible by means of drills which are performed in a disciplined way and in which involvement of all stakeholders is mandatory. It is of great importance that a developed plan is duly implemented because weak points are found out only through practice of the drills. Drills are helping the stakeholders to grasp the plan better and making clear what kind of support is required during disasters and emergencies. **Drills especially involving the people with disabilities make them understand their special requirements better and thus inform both the local administration and disaster organizations about them better.**

This chapter concerns standard drill conditions together with special drill conditions for people with mental impairments who may have inability to understand and comprehend.

Standard Disaster and Emergency Evacuation Drills

When creating a disaster and emergency case similar to the real conditions, the participants should not be informed previously for not overlooking any situations that may create problems and anxiety on the people with disabilities. In fact, it is mostly impossible to warn anybody before a real disaster and emergency case.

However, it may not be applicable especially for persons with severe mental impairments or ASD. A “chaotic” atmosphere likely to be created in case of a disaster and emergency such as earthquake or fire may make them excessively anxious and cause behavioural disorders, temper tantrum or resistance to the drill.

To be prepared for such situations, they should be informed about these drills directly or through their relatives and sometimes they should be made informed that drills may be conducted without prior notice.

Issues to Consider

During the performance of standard drills, some difficulties such as closed corridors, stairwells, blocked doors or unconscious persons along the accessible evacuation routes should also be added to assess efficiency of the measures taken.

Additionally, particularly in the offices and schools, the Emergency Response Team Members attached to the Incident Command System (ICS) should consider the following matters during a drill.

Emergency Officer:

- Informs the employees and tenants/users in the facility, school personnel and students about the disaster and emergency by taking advantage of all necessary and appropriate means;
- Notifies the Emergency Management Centre immediately; comes into contact with the provincial fire department, ensures coordination and informs about the emergency;
- Informs the provincial fire department about full names and quantity, locations, disabilities and needs of the persons who wait in the refuge or rescue area.

Floor Warden :

- Notifies the Emergency Officer, builds and maintains constant communication with him/her;
- Organizes substitute members of the Emergency Response Team instead of the absent team members;

- Checks all working areas, meeting rooms, conference rooms and public restrooms carefully to identify the people with disability or reduced mobility among the employees/students/visitors or other personnel on the floor.

Search and Rescue Team:

- Checks whether the Emergency Response Team, its alternates and search monitors are in their designated places and functional points;
- Warns the floor warden if the employees/students/visitors or other personnel in the allocated areas need additional Emergency Response Team or alternates;
- Informs the floor warden about each incident which requires help, including any injured personnel.

Emergency Response Team/Alternates:

- Comes into communication with the disabled person and informs with hem/her about the actual status;
- Accompanies the person with disability to the nearest stairwell and/or area of refuge or rescue and provides support;
- Stays with the disabled person until he/she contacts with the Emergency Officer or the fire rescue team or emergency support arrives;
- If requested, gives assistance in moving the disabled person up to the emergency vehicle and/or in placing him/her on board the vehicle;
- Only if it is highly required, supports the disabled person who is carried down the stairs or moved to the gathering area outside the building;
- Stays with the person with disability until “all clear” signal is given;

- Supports the disabled person returning to the area of work/study/living.

Evaluation

Evaluation made after each drill, gives the opportunity to identify gained experiences and to discuss plan changes. As action plans are “living” documents, feedback about stakeholder’s participation and success and failures of the drill will help to improve the plan.

- Emergency Officer and floor wardens should regularly evaluate to what extent the Emergency Response Team has been effective and fulfilled its responsibilities
- Under the condition that the personal data of all participants will be protected, written results of the Emergency Response Team concerning its performance in the drill should be provided to assure regularly improvement of the evacuation process.
- Feedback on the written results are also important for further trainings.

References:

A Guide To Creating Emergency Evacuation Procedures Including Considerations For People With Disabilities (2010), USA, California. (<http://interwork.sdsu.edu/cmei/modules/resources/EvacGuide2010.pdf>) (ET:Temmuz, 2020)

Disaster and Emergency Drills for People with Mental Impairments or ASD



For people without special requirements, conduct of disaster and emergency drills twice in a year are recommended. People with disabilities and particularly

people with mental impairments or ASD should perform drills more frequently according to the personal evacuation plans prepared previously. These drills should be organized for different scenarios where a person with mental impairment or a person with ASD is alone or together with a relative giving support to him/her. It will enable a person with mental impairment or a person with ASD to:

- Independently deciding on what he/she should do during a disaster and emergency;
- Following the correct steps to go to a safe area when he/she should evacuate the site;
- Learning what he/she should do when the emergency case is over;
- Let his/her relatives or carers gain experience about what kind of support they should provide.

Issues to Consider

In addition to the drills to be conducted with

people with mental impairments or ASD, their relatives or carers are recommended to talk with them in certain intervals about different scenarios concerning disasters and emergencies and practice repetitions for the steps to be followed. After it is explained what should be done in which scenario, each scenario should be presented to the mental impairment or ASD individually and asked what he/she should do in order to understand and what extent he/she has understood the subject matter. If there is no carer or supporter together with the mental impairment or ASD, repeat the personal information that he/she should give to the authorities after the emergency, make rehearsals on how he/she will communicate with them in the clearest way and if necessary on how he/she will use alternative means of communication with them. The important point is that when such persons give information about themselves to the authorities, they should use some simple images and key words and as they easily forget what is told them, they should ask for written information or slowly speaking.

After all these explanations concerning the people with mental impairments or ASD, there are some suggestions that can be provide for the emergency personnel:



- Considering memory-related problems of people with mental impairments or ASD, it should be kept in mind that these persons may forget what to do in an emergency despite of the previous drills or trainings. Hence it would be appropriate that the emergency personnel should explain them again what they should do one by one.
- Considerin concentration-related difficulties, when making these explanations, the personnel is recommended to use as simple, short and clear statements as possible to facilitate the concentration of the person with mental impairment or ASD and avoid using long statements which may confuse their mind.
- Similarly, when the personnel ask questions to such a person, the questions should be as clear and short as possible. For example, instead of asking “Ahmet, can you tell me your father’s name?” it would be more appropriate to establish eye contact with the person with mental impairment and ask “What is your father’s name?” However, as it may not be possible to establish eye contact with a person with ASD, different ways of communication with them should be determined previously for such cases.
- Some people with mental impairments or ASD may have necklace, wrist ID and similar articles, notes or tattoos on them which contain important personal information about them as previous precautions taken by their families.

Especially for those people with mental impairments or ASD who show difficulties in communication it would be usefully if the emergency

personnel should check whether there are such articles and marks.

- Stages of the emergency case should be reviewed in regular intervals (mental drill) and practices should be done at least two times a year in the office, home, school or drill sites (physical drill).
- Do mental, physical and local practices to get accustomed to your plans.
- The higher the impact of mental impairment is, the better it would be to increase the number of practice repetition; in this respect, the frequency of drill may go up to one in a month.
- Drills vary depending on type of disaster and emergency; for example, earthquake drill and fire drill are very different from each other

Mental Drills

You may perform mental drills by thinking about what you will do and then discussing the actions you suggest. For example, you may start by thinking about the following situations and how to cope with them. In addition, we suggest you to consider the examples given in the section of physical practice as well.

Assume your family members are located in different places during the daytime. You are in the office or in the place where you work as volunteer and your children are in school and your spouse or housemate in the office. How would you meet and what would you do? Assume your house is badly damaged and it is not safe to stay home. In such case you may “camp” in the garden or you may stay in a near shelter. For such an assumption, you should answer the following questions:

- How will you reach the shelter to make use of it?

- What would you take with you when your home and location is announced unsafe and you should stay in another place for about 2 or 3 weeks?
- Assume you use wheelchair and just survived the earthquake. Telephones are out of service. The mobility devices have fallen from the shelves or bed and blocked the way out. You notice that the ramp for the wheelchair has dislocated from its place in the doorway. What would you do?
- Practice the evacuation.
- Practice ways of using alternative evacuation routes.
- Practice together with your personal support network, so that they will know how they will reach you in the building and how they can help you out.
- Practice to go out of the building and assemble at the designated place.
- Practice to shut off or operate gas, electric and water valves (remember that the gas valve may only be opened by authorized officials). Ensure that your personal support network will help you about these matters when you need it. Make sure that all members in your support network can perform it quickly.
- Practice to cook and do the cleaning without using any utility. Use minimum power and water as far as possible. Use renewing your needs once in six months as an occasion for practice. If you have children, teach them to be a part of the “earthquake game”.

Physical Drills

The following steps are recommended for physical drills:

- Do practice in each room where you spend most of your time and determine the movements for protection.
- Identify the obstacles you may encounter and conduct realistic drills as far as possible.
- Implement the actions that you really would do during an earthquake. Practice hiding in the event of an earthquake. If the moving you have to do is to bend over and protect your head, do this.
- Practice to tell people quickly and succinctly, especially in regard to your disability, what they should know to evacuate you safely.



Practice Drills

When starting the drill, you may apply following steps basing on the example of earthquake:

- Start when one shouts “Earthquake!”
- Everybody should stop what they do for participation in the drill.
- **Sample case:** You are in the kitchen and ground starts shaking slowly, then the shaking increases, slows down and starts again rapidly. The ground is going forwards and backwards like a big piston. And you feel yourself in a vessel hit by a terrible, great storm. Cabinet doors open, plates and glass articles fall, the door of the refrigerator opens and its contents fall out, the refrigerator slides and overturns, roof tiles fall and then the shaking stops! What would you do?
- **Sample case:** You are in the bedroom. Suddenly a huge energy starts shaking, cracking and waving. You observe that plasters are falling down, glass and frames are breaking, high furniture articles and lightshades are moving and that plants and lights hanged to the ceiling are swinging and falling down. You fall out of the bed. The doorway of the bedroom is blocked. There are broken glasses all around. The door is stuck. What would you do?
- **Sample case:** Water, power and gas utilities are severely damaged and your district will not be able to use the infrastructure services for 3 weeks. Police, fire department and hospital personal are quite busy and cannot respond even to the most urgent patients. Transportation service is not provided. What would you do?
- **Sample case:** You live alone at third floor and you need to use the elevator for going up and down. The elevator is out of service and

cannot be repaired, and you are stuck in your apartment. Neither radio nor television broadcasting is available. What would you do?

- **Sample case:** You first hear a tremendous crack. The whole building is shaking; the noise, shaking, cracking and humming become stronger. The ground is roaring. And it finally decreases. Silence comes over. You are in the office and sit still when the office at twelfth floor of the skyscraper starts to come down. When everything is getting darker, you hear no more the noise of the people walking around; it seems that everybody went out. You are alone. Telephones and elevators are off. A pipe bursts, there is flooding everywhere. At last you hear sound of sirens, ambulances and fire trucks. But none of them stops. What would you do?
- **Sample case:** All window panes of your house are broken, plasters are fallen down, small damages have occurred on the roof and the roof tiles have displaced. All utilities are off, but you are still at home. What would you do?

Although we do not like asking and answering such questions, these are the possibilities that we may encounter in different disasters and emergencies and they require physical drills as much as mental drills. Taking the steps recommended in the stages of preparedness, which are mentioned earlier in the *Disaster and Emergency Planning Guide for People with Disabilities*, will make you considerably prepared for such drills.

Evaluation of Drills

It is possible to evaluate your performance in an earthquake drill in general by answering the fol-



lowing questions:

- What did and what could the people with/without disabilities do for avoidance of getting injured during the earthquake?
- Did people on duty during and after the earthquake fulfil their responsibilities?
- Was the evacuation route designated for earthquake clear or blocked?
- Could the resulting damages be reduced or eliminated easily?
- Were persons with disabilities and injured people evacuated properly?
- Was the communication cut off?
- Were the different needs of the persons with disabilities received easily and fulfilled over one centre during the evacuation?
- Was the damaged utility shut down immediately?

Basing on the measures mentioned in the evacuation chapter of people in different disability groups you may increase the evaluation criteria of personal drills according to your special needs and thus enhance your drill performance

References:

- A Guide To Creating Emergency Evacuation Procedures Including Considerations For People With Disabilities* (2010), USA, California. (<http://interwork.sdsu.edu/cmei/modules/resources/EvacGuide2010.pdf>) (ET: July, 2020)
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5th Step

Things to Be Done during/ after Disaster and Emergency

This chapter deals with things required to be done in general during and after the basic types of disasters; the matter of earthquake is addressed more detailed according to the different types of disabilities.

Earthquake

Earthquake is the most experienced type of disaster in our country, which is causing huge damages. Giving proper response during earthquake, first of all, reduces loss of life as well as injuries. For proper response during earthquake, people with disabilities should know both how they should behave and how the people around should give them assistance. In this respect, we focus on special details according to different types of disabilities in this chapter. As standard measures for the **people with speech impairments** given in the earlier chapter are sufficient, they are not dealt within this chapter.

Things to be Done by Types of Disabilities During Earthquake

General Information

DROP-COVER-HOLD ON or LOCK-COVER-HOLD ON

- Shelter next to or under a sturdy object (fixed white good, table, etc.) by practicing **DROP-COVER-HOLD ON** or **LOCK-COVER-HOLD ON**. Drop down and try to cover your head and neck in the best way possible. Once the earthquake starts, decide how to reach to that point. If you use wheelchair, **unlock the wheels** to reach there.
- If you are in bed when the earthquake starts, stay there. **Lock wheels** of your wheelchair, if it is next by you, so that it does not drive

away of you by quake. Cover yourself with the bedding and bedsheets and protect your head, neck and chest with pillow, blanket, books or similar things against falling objects and other debris. However, if you are under a light fixture in danger of falling, shelter in the nearest safe point.

- If you cannot cover by bending, then only cover yourself. If you cannot cover yourself or find a proper place for covering, cover your head and face with whatever available (coat, blanket, newspaper, clothing, cartoon, etc.) against the falling debris and scattering glass pieces.
- If you can, sit in a corridor, resting your back to a wall and spreading your feet toward the opposite wall. Stay away from the glass and objects falling. If you cannot move, stay where you are until the shaking is over.

Important details:

- Stay indoors. Do not attempt to escape out.
- Go away from the glazed doors, mirrors and windows.
- Also avoid heavy objects such as bookcase, display cabinets, tool cabinet and hanging flower pots.
- If you are in the shower or bathtub, sit down to avoid slipping and fall; protect your head, face and neck (use towel, shower curtain or your hands for this purpose). Turn off the water and remove the plug of the bathtub.
- If you are in the kitchen, stay away from the refrigerator, range cooker and high shelves if they are not made fixed.
- Stay in the corridor, hall or next to or under a sturdy good (fixed domestic appliances, table, etc.).



- If you are in a crowded place such as theatre, stadium and store, do not run towards the exit because hundreds of people may do the same thing.
- If you are in a store, stay away from the shelves having objects that may fall down.
- Go towards the side walls and corners of the store and stay away from glass.
- When shaking is over, wait for several seconds prior to leaving your place.
- If you live in a multi-storey building go to the

corridors or stairwell after the earthquake. These spaces do not provide protection against falling objects, but there are lots of people trying to go out. You may not walk or may not use your wheelchair or may not stand firmly during a fierce shaking. They may help you.

- Stay away from the underpasses, power lines, advertisement boards, trees and similar dangerous places when shaking continues. Stay in your car. Keep your seat belt fastened.

Remember!

During a disaster and emergency, do the most suitable gesture, DROP-COVER-HOLD ON or LOCK-COVER-HOLD ON and reduce target and remain in the same position until the risk is over.

Car is a safe place to survive an earthquake. Flexibility provided by the car's bumpers will reduce shocking shakes of the earthquake.

- If you are in a high-rise building, stay away from the windows, stay on the floor you are and avoid using the elevator. Power of the elevator may be cut off.
- If you are in a high-rise building and there is no desk or table near you, shelter by an interior wall and cover your head with your arms.
- Interior walls are generally appropriate. They keep two sides, the ceiling and do not collapse easily. Do not surprise if the fire alarm and sprinkle system starts working.
- It is very dangerous to be outdoors and in the areas surrounded by high-rise buildings.
- If you are outdoors, stay away from the buildings, power lines, structures, walls, street light poles, chimneys, antennas and other dangerous objects.
- If you are walking on the pavement beside a building, shelter into a doorway to avoid falling bricks, glass, plasters and other debris.
- If you are outdoors, protect yourself against the roof tiles falling from the buildings.

Fear and Panic: We should know what to do to protect us during earthquake. Earthquakes may be frightening, but remember that the shaking will be over in a short time. Getting into a panic and rushing towards the stairs and balconies cause unnecessary death even in many minor earthquakes.

As soon as shaking starts, do not stand stock-still or run here and there, but keep in your place and behave in the most appropriate manner. Remember that in the past many people were severely injured during many earthquakes although they lasted for a short time and gave no damage to the buildings. Panic will only increase the loss created by the earthquake.



If you are indoors, do not stand when you feel the earthquake and never do the following acts:

- Do not run here and there.
- Do not go out to the balcony.
- Do not use the stairs and elevators.
- Do not jump from the window and balcony.

Stay away from the following objects, if you did not fix them previously:

- Windows
- Doors
- Glass partitions
- Bookcases
- Lights
- Pictures
- Hanging flowers and pots
- Shelves
- Cabinets
- Chemicals
- Burning kitchen stove and oven
- High furniture
- Loose structural components (chimney, suspended ceiling, central heating, etc.)

If you are in the kitchen during earthquake and there is a burning gas kitchen stove, you should do following:

- Once you feel the shaking, turn the stove off.
- Then practice the combination of **DROP-COVER-HOLD ON** or **LOCK-COVER-HOLD ON**.



Things to Be Done by People with Physical Impairments during Earthquake



People with physical impairments should prepare a plan to understand whether they can protect themselves and should do mental drill at least in this respect. If people

with physical impairments assume that they will be alone during an earthquake, they should make themselves prepared accordingly. In case of an earthquake, they should take a position to protect their body according to the physical features of the location and their own disabilities. Here, the most important thing for the person with disability is not to get into a panic.

Basic behaviours to be adopted may be summarized as follows:

- If you are in your wheelchair, do not throw yourself down off the wheelchair.
- Apply the physical movements of **LOCK-COVER-HOLD ON** and lock the wheelchair (to stay firm in your place) and hold. Try to protect your head with your arms.
- If you are in a seated position, stay where you are and protect your head with your arms.
- If you are standing, sit down or support your body to prevent falling and protect your head with your arms.
- When you sleep at night, keep your special devices such as your prosthesis in a near and easily accessible place.

If a person with disability is connected to a life-support system and cannot move, he/she will need assistance of everybody around him/her. In order that such a person can survive an earthquake with minimum damage, the life-support system should be fastened previously.



Things to Be Done by People with Visual Impairments during Earthquake



Blind people or people with different visual impairments should prepare a plan to understand whether they can protect themselves and should do mental drill at least in

this respect. If blind people or people with different visual impairments should assume to be alone at time of an earthquake they should make a plan accordingly. People with disabilities should prepare themselves for disaster and emergency cases in such a way that they will be able to move alone and independently. If they feel any hesitance in this respect, the disaster and emergency plan should be prepared together with a close person that may help them (see p. 40).

A person with visual impairment should take position of **DROP-COVER-HOLD ON** to protect his/her body at the moment of earthquake. Here, the most important thing for a person with disability is not to get into panic. If a person with visual impairment is in an unfamiliar place and there is nobody to accompany him/her at time of earthquake, he/she should request help from the people around him/her.

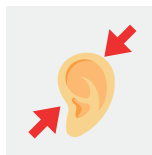
If the person with visual impairment is a child, he/she may need more assistance from the people around him/her. If he/she is at school at time of earthquake, he/she should practice the combination of

DROP-COVER-HOLD ON to protect himself/herself.

In addition, he/she should listen to the commands to be given by the teachers and other school officers.

Frequent drills of people with visual impairments, taking advantage of their more powerful senses like touch, hearing and smell for prevention of getting into panic, will make them cool and act correctly in case of earthquake.

Things to Be Done by People with Hearing Impairments during Earthquake



People with hearing impairments should keep their body small as a target and practice the combination of **DROP-COVER-HOLD ON**.

Unlike others, people with hearing impairments should always be visually alert against any hazards when they protect their body by keeping small at the same time. Objects that may fall on them and other non-structural components that may collapse, pose the greatest danger for this group of people with disabilities. If the person with hearing impairment is a child and he/she is at school at the moment of earthquake, then he/she should strictly act according to the instructions of the teacher and other school officers.

In order that people with hearing impairments may attract attention of others about their presence, it is recommended they should have a whistle or similar instrument on or near them. It is also recommended that an illuminated sign should be set in a visible place to indicate that there is a person with hearing impairment living at that home in case of disaster and emergency.

Things to be Done by People with Mental Impairments or ASD During Earthquake



For people with mental impairments or ASD, protecting themselves in case of an earthquake depends on the level of their mental impairment. Those who

can protect themselves should keep their body small once the shaking of the earthquake starts and practice the combination of **DROP-COVER-HOLD ON**. In order to learn this activity, it is recommended to conduct drills frequently and with simple commands.

Those people with mental impairments or ASD, who cannot protect themselves or are possible to remain making involuntary movements or stay without any movement in their place, will need assistance of other people around them in case of an earthquake. These persons should definitely have a personal disaster and emergency plan previously prepared in order to survive an earthquake with minimum damage. The people in this group of disability should, as earlier discussed, have an ID tag that they can wear on their neck or wrist.

Things to be Done by Types of Disabilities After Earthquake

General Information

Be prepared against aftershocks. The secondary shockwaves are generally more harmless than the previous shock; however, they may give additional damage to weakened buildings. Stay away from the damaged areas unless it is otherwise stated by the police, firefighters or search and rescue teams.

If you live on a coastline, be prepared against a possible tsunami. These are also called seismic sea waves. Tsunami alarm to be given by the local administration means that a series of dangerous waves is about to arrive. Stay away from the seashore.

Before Evacuation

To be informed about what should be done immediately after an earthquake will allow you to survive disasters and emergencies with minimum damage and having quick access to the support you need. It is most likely for you to be affected by a possible disorder because of your special needs. Hence if you know what to do, you may provide supporting life safety of yourself and other people, and facilitate your evacuation process. Things that you should do after an earthquake are described below.

When Shaking is Over

- Take a deep breath and review status of yourself and other people.
- Do not light a match, lighter or candle and do not touch the electric switches.
- Wear your sturdy shoes, work gloves and dust mask. You should protect your hands and feet against cuts.
- If you need help, give sign by using telephone, if it operates, or other warning devices (whistle, horn, ring, a tool for hitting a wall or window for noise, torch, siren, alarm and other noisemakers). Try any way to attract attention. If you are safe, inform your support network that you are well by ways you had determined previously.
- Check whether there is any injured person and apply first-aid procedures. Only apply

treatment for vital injuries; slight injuries, fire injuries and other injuries should be treated after the check process. Do not move a severely injured person unless there is a vital risk.

- If you experience a fire: Try to extinguish it, if it is an initial fire. If not, close the doors and leave the place. Do not waste time to take your clothes. Your life is more valuable than your things, do not leave it to chance. Turn on your TV or battery-powered radio. Find the emergency news broadcasting channel and follow the information and instructions (Istanbul Governorate Radio 103.0 Afet FM). If you smell gas or hear a leakage sound, open the windows, turn off the main gas valve and leave the building by using the evacuation routes you determined previously.
- Do not use the elevator (power may cut off suddenly).
- If required, make ready your disaster and emergency supply kit you had prepared prior to evacuation.
- If you have a pet, especially a service animal, keep it in a closed place and put its collar on.
- If you are alone or cannot go out of the place, remember your disaster and emergency plan. The members of your personal support network will try to help you. Remember what you had learnt about earthquake and try to do those that you can do.
- Stay away from such places where you may become stocked in or the search and rescue team members may not notice you.
- After you secure yourself, check your neighbours and other acquaintances.
- If you have respiratory or cardiac disease, make a mask by use of towel and similar thing to filter out the air you breathe.

- Remove major hazardous and dangerous substances.
- Use your emergency resources correctly. If you think that sewerage does not work well, do not use toilets and sewage utility. A leakage inside or outside the buildings is a sign of it.
- Be prepared against aftershocks. They may cause new damages and risks.

During Evacuation

People with disabilities should be evacuated from the building after the shaking is over. If the person with disability cannot abandon the building alone, the evacuation should be performed by help of other people. This process may develop in different ways depending on the different groups of disabilities.

If you have to evacuate your home after earthquake, pay attention to the following points:

- Take your disaster and emergency supply kit with you. It should contain your drugs, ID card and other personal articles (see Disaster and Emergency Supplies, p. 53)
- Contact with the members of your support network.
- Act in accordance with the warnings made by the authorities by means of communication such as loudspeakers and radio, etc. (Istanbul Governorate Radio 103.0 Afet FM).
- Wear protective clothes and sturdy shoes.
- Lock your home.
- Use the evacuation routes designated by the authorities.

If you have time during the evacuation, do following:

- Turn off the power (if you do not detect a

smell), water and natural gas switches.

- Inform your acquaintances about where you go.
- Take precaution for your pets.
- Never go back into the building again until the authorities announce that the risk is over.

Different requirements may arise depending on the different type of disability after the earthquake and during the evacuation.

Things to be Done by People with Physical Impairments After Earthquake



Some people with physical impairments may abandon their building by themselves. These persons should be careful about anything on the way out that

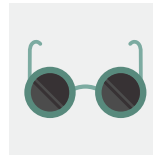
may be dangerous. If required, they may use alternative evacuation routes. If people with disabilities are able to carry it, they should take the disaster and emergency supply kit with them.

If a person with physical impairment cannot evacuate unaided after earthquake, he/she will need support. Evacuation of people with disabilities is carried out according to the status of their disability, condition of the people who may assist them and damage of the building they are in. The evacuation plan should be made by considering all possibilities beforehand; for example, a person with physical impairments using wheelchair may have to be carried without wheelchair. Besides, remember that people connected to a life-support device may need it during the evacuation.

Another point that should be considered is that some people who have respiratory distress should not be carried by the relatively easy

common method of the firefighter way of carriage (carrying on shoulder).

Things to be Done by People with Visual Impairments After Earthquake



A blind person or a person with different visual impairments may be inside or outside the building alone or together with others at the moment of an earthquake.

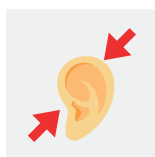
Different methods of evacuation may be required depending on the position of such people when earthquake strikes. Each of these different situations should be considered and an evacuation plan should be made previously for each of them.

If a blind person or a person with different visual impairment is inside a building and together with other people with visual impairments, for example in school, **forming a chain** would be an evacuation method to be preferred. According to this method, they hold hands to form a chain where the most experienced person and/or the person with better sense of vision will lead the chain and the others will follow him/her according to the level of their disability. In the evacuation method of chain formation the most appropriate solution is to put blind or people with lowest vision among others as far as possible.

Another point that you should be remembered is that blind people or people with different visual impairments have exceptionally strong sense of hearing in general. Hence, it would be a very favourable method if someone gives **audial command** during evacuation for the orientation of people with visual impairments. Giving such command from a single source, instead of several sources, will be appropriate to prevent any possible disorder.

If a blind person or a person with different visual impairment is outdoors and at a place unknown by him/her during earthquake, it is more appropriate for him/her to remain there. Trying to go somewhere else may be challenging for these people. Under such conditions, it would be proper for them to ask help from the members of their support network or from the nearest first responders or public organizations (police, district administration, municipality, military, etc.) after earthquake.

Things to be Done by People with Hearing Impairments After Earthquake



In many cases, people with hearing impairments may evacuate by themselves after earthquake. However, if they evacuate alone, they should be very careful about

objects that may pose threat for them. If the person with hearing impairment is a child and is in the school when the earthquake strikes, he/she should follow the instructions given by the teacher and other school officers during evacuation.

People with hearing impairments may need help and support for certain things from the early hours after evacuation. While such help and support may be given by the members of their support network, it may also be provided by other groups of people with disabilities or from official and volunteer response organizations. People with hearing impairment should try to come into contact with organizations such as **society of people with disabilities** if they are member of it. It would be an important step for a person with hearing impairment affected by the earthquake to find solutions to the problems he/she may encounter.

Some people with hearing impairments may require a translator or equipment to communicate with other people. If it is possible, they may also ask aid for this and similar matters from the **crisis desks**. If it is not possible, they should definitely inform the official authorities about their conditions. After earthquake, the professionals providing rescue or healthcare services should always take into consideration the special conditions of the people with disabilities.

Things to Be Done by People with Mental Impairments or ASD After Earthquake



Evacuation of people with mental impairments or ASD may need support of other people according to the affected level of their mental impairment. **The aid provided by the members of their support network is**

very important for this group of disabled people.

People with mental impairments or ASD may have difficulty in protection themselves and/or experience great panic and may regarding to this cause problems during evacuation. Taking into consideration all these possibilities for people with mental impairments or ASD, the evacuation drills should be practiced previously. Persons supporting such people with disabilities during evacuations should also be very careful about themselves.

If the person with mental impairment or ASD is a student and at school when the earthquake strikes, he/she will need assistance of teachers and other officers for evacuation after earthquake. If the students evacuate by holding hands and forming a chain, the students with mental impairments or ASD should be placed in different points of this chain for evacuation. If



field workers coincide with a person with mental impairment or ADS alone after earthquake, they should definitely take him/her to a safe place or hand over to another field worker, even if he/she is not injured. **Otherwise, it may not be possible to protect these people with disabilities against risks such as organ mafia and sexual harassment.**

During Flood

Listen to the radio or television for information. If you are not officially warned to leave home, stay indoors and climb the highest point as far as possible.

Things you should do before the evacuation:

- Turn off the main switches or valves, if you are instructed to do so.
- Disconnect the electrical equipment. Do not touch electrical equipment if you are wet or standing in water.
- If you have to leave your office, remember following evacuation warnings:

- Do not walk through flowing water. Even water in depth of 15cm may cause you to fall down. If you have to walk through the water, walk at the place where water is not flowing. Control soundness of the ground in advance by using a stick.
- Do not drive your car into flooded areas. If the flood water around your car rises, abandon the car and get to a higher place, provided you can do it safely. You and the vehicle can be instantly swept away by the flood.

After Flood

Things you should do in the process after the flood:

- Watch the news and get information whether the mains water is innocuous to drink.
- Stay away from the flood water, it might have been contaminated by oil, gasoline or sewage. Water may be electrically charged due to any underground or fallen power lines.

- Avoid the flowing water.
- Be informed about areas from which flood water has receded. Roads may be damaged and collapse under weight of your vehicle.
- Avoid from the broken power lines/cables and notify the power administration.
- Return home if only the authorities instruct you to do so.
- Stay away from the buildings surrounded by the flood water.
- Be very careful when entering the buildings because there may be invisible damage, particularly in the foundations of them.
- Clean and disinfect everything got wet. Sludge left after flood water may contain sewage waste and chemicals.

During Fire

- Apply your emergency evacuation plan according to your predefined requirements.
- Ask for support from your family/neighbours/colleagues.
- If you live in a multi-storey building, do not use the elevator.
- Stay where you are if it is safer and wait for

arrival of assistance.

(For detailed information about fire evacuation, see p. 85).

During Thunderstorm

- In a forest: Seek shelter under a thick growth of small trees in a low area.
- In an open area: Go to a low area such as ravine or valley. Be alert for flash floods.
- On open water: Get to land and find immediately a shelter.
- Anywhere you feel your hair electrifies and stands on end (which indicates that lightning is about to strike): Crouch low to the ground on your heels. Cover ears with your hands and tuck your head between your knees. Make yourself a target as small as possible and minimize your contact with the ground. DO NOT lie flat on the ground.

After Storm

- Call **112** Emergency Call Centre immediately, if necessary.
- Before you attempt to help a victim of lightning, consider the following points:





- If the victim stops breathing, start mouth-to-mouth resuscitation.
- If the victim's heart does not beat, apply cardiopulmonary resuscitation.
- If the victim has a pulse and is breathing, check other possible injuries. Inspect whether there are burns where the lightning entered and left the body. Also be careful for possible nervous system damage, bone fractures and loss of hearing and vision.

During Hurricane/Whirlwind

- When announcement is made for hurricane or whirlwind, go to the shelter immediately!
- In a building (e.g. residence, small building, school, children's nursery, hospital, plant, shopping centre, multi-storey building): Go to an area of refuge designated previously, e.g. a safe room, basement, storm shelter or lowest level of the building. If there is no basement,

go to the centre of an interior room at the lowest flat (cabinet, interior hallway); stay away from corners, windows, doors and exterior walls. There should be as many walls as possible between you and outdoor. Get under a robust table or desk and cover your head and neck with your arms. Do not open the windows.

- A car, trailer or caravan or similar vehicle: Go out of it immediately and get to the lowest flat of the nearest safe building.

Even if vehicles such as caravan are anchored onto the ground, they provide minor protection against hurricanes and whirlwinds.

If you are outdoors without any area of refuge:

- Lie flat with your face down in a nearby ditch or recess and cover your head with your arms. Be prepared against any potential flooding.
- Do not stand under an overpass or bridge. Lower and flat locations are safer.

- Never attempt to outrun a hurricane or whirlwind in urban or congested areas when you drive car or truck.
- Watch out for flying debris. Most of the fatalities and injuries is caused by the flying debris.

After Hurricane/Whirlwind

- Continue to follow local radio and TV channels for actual information and instructions. There may be restricted access to some areas or some roads may be blocked completely.
- Be careful against the broken power lines and damaged natural gas lines. Notification of potential risks will prevent restoration of utility services more quickly and formation of more hazards and injuries.
- Stay away from the disaster zones. Your presence in such areas will make it difficult for search and rescue and other emergency operations and also damages caused by the hurricane or whirlwind may put you in danger.

During Snowstorm/Extreme Cold

The following are guidelines for what can be done during a winter storm or under conditions of extreme cold:

- Listen to the radio and television for weather reports and emergency information.
- Eat regularly, drink much liquid, but do not consume caffeine and alcohol.
- Avoid of extreme fatigue when shovelling snow. High exhaustion may cause a heart attack; a major cause of death in the winter. If snow must be shovelled, perform warm-up and stretching exercises before going outside.
- Be careful about signs of frostbite. Among them are loss of feeling and pale appearance

in extremities such as fingers and toes, ear lobes, and the nasal tips. If these symptoms are detected, get medical help immediately.

- Watch for signs of hypothermia (excessive loss of heat). They are uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and considerable exhaustion. If any of these hypothermia symptoms is detected, get the victim to a warm location, remove his/her wet clothes, warm first the central parts of his/her body, and give hot and non-alcoholic beverages if the victim is conscious. Get medical help as soon as possible.
- If required, keep your home cooler than usual to save fuel. Stop heating some rooms temporarily.
- Maintain ventilation when using kerosene heaters to avoid building up of toxic fumes. Refuel kerosene heaters outdoors and keep them away from flammable objects by minimum 1 meter.

After Snowstorm/Extreme Cold

Take the same measures applicable after flood against risks posed by the torrents arising from melting snow after a winter storm/extreme cold.

During Tsunami

If you are on the seashore or near a river when earthquake occurs and if the earthquake lasts more than one minute, try to get to a higher level of land as quick as possible against risk of tsunami and move on to the hinterland.

During Pandemic

Follow radio and television for the current status and emergency information. If restrictions

significantly limit outdoor activities, bring into life the solutions you previously developed together with your personal support network. If you need a more intensive care, select the most appropriate one of the alternative arrangements with respect to your personal care and preparation of your meals. Start to take measures from the first warning stage and try to provide appropriate options for personal care. Identify those of the personal support network whose living conditions are not sufficiently insulated and do not negotiate with them. Make sure that the individuals giving support to you comply with all hygienic measures and social distancing rules. If required, spend the peak period of pandemic at home together with the member of your support network you designated previously.

During Chemical Gas and Nuclear Leak

When the authorities warn against nuclear leak, go to the predesignated official or private shelter as quickly as possible. In case of chemical risk take refuge in an interior part of the building, a place with few windows and appropriate for protection on the upper floors if possible. Follow the radio for the most up-to-date status and emergency information. In the nuclear



accidents, contamination should be identified. After such identification, according to the radiation level and degree of radioactive contamination, measures should be taken, starting from light measures such as consumption of raw vegetables and fruits only after washing them well, followed up by severe measures such as distribution of iodine tablets to the public, evacuation of the area and temporary or permanent restrictions on settlement in the said area and prohibition imposed on consumption of food materials exposed to radioactive contamination. Remember that you may have to spend your time in the shelter by managing with the food, water, lighting, basic first-aid supplies, etc. for a long time.

During Landslide

If you are indoors:

- If you have not sufficient time to go out of the building and move away from the zone of landslide, stay indoors.
- Construct a life triangle under or near the sturdy goods and apply the combination of **DROP-COVER-HOLD ON** or **LOCK-COVER-HOLD ON**.

If you are outdoors:

- Keep away from the route of the landslide or mud flow in the moment of danger and move away immediately to higher levels as far as possible and warn the people around you against landslide.
- If there is no time to escape from flow of mud and debris and there is no sturdy structure around to hide behind it, protect your head and neck by the combination of **DROP-COVER-HOLD ON** or **LOCK-COVER-HOLD ON**.

After Landslide

- First of all, make sure you are safe. If required, move away from the dangerous zone and keep yourself secure.
- Switch and turn off the power, gas and water supplies nearby. Do not attempt to lighten the place by using match or other flammable material or electric instruments until you are sure there is no gas leak around. Use a torch.
- If there are injured people or people in need of help around you and there is no danger such as fire or a new landslide, do not displace them.
- Warn the people around you against hazardous wall, roof and chimneys and do not walk around them.
- Follow the radio and television. Listen to the directives broadcasted.
- Keep the avenues and streets empty for the emergency aid vehicles.
- Do not enter into the buildings to get your things.

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6th Step

Recovery Phase after Disaster and Emergency

Data on People with Disabilities

General Information

The recovery phase starts after the response phase. Recovery is the phase following a disaster in which agencies and organizations help affected persons and communities to develop and implement plans and structures for return to pre-disaster functioning. The recovery phase is generally the longest phase of a disaster and can last for an extended period of time, even several years. Activities carried out in this phase include provision of temporary shelter area services, elimination of ongoing medical problems, support for solution of socioeconomic problems and solution of problems arising from the area of the victims or their personal characteristics in order to rearrange social structure and physical structure of the disaster zone in the process of resumption of the routines of daily life. As this phase also include activities for resumption of daily life or making it better than it has been in the past such as restoration of infrastructure and vital support system or starting permanent housing projects etc., it requires cooperation of the central and local administrations. **In the phases of disaster cycle, the Recovery Phase is one where individual efforts and intervention are limited and the individuals need support of concerned organizations and authorities utmost.**

This chapter, therefore, deals in general with results of studies on post-disaster requirements of the people with disabilities and their families; obstacles in the recovery phase; roles of the public and local municipalities, AFAD and volunteer organizations with respect to resources and services.

Studies show that there are significant differences worldwide in terms of the vulnerability of people with disabilities after a disaster and emergency and the resources they have before the disaster (Stough, Kelman, 2018).

In disaster and emergency, people with disabilities are more disadvantageous than people without disabilities. For example, people with disabilities are more likely getting sick after disasters. People with disabilities are not only affected more, but the damage and severity of the impact is also higher (Stough, Kelman, 2018).

Results of Study on People with Disabilities after Disaster

- Higher rate of death
- Higher rate of loss of property or damage
- Higher rate of injuries
- Higher rate of medical-related complications
- Less support by the emergency rescue personnel or volunteers

Furthermore, studies show that people with disabilities recover at a slower and less rate. Although people with disabilities have similar needs with non-disabled people, their recovery may become more complicated and require additional support. Disasters and emergencies cause long-term negative psychological effects on people with disabilities. Studies show that people with disabilities who survived disaster and emergency are subject to increased risk of mental medical problems and Posttraumatic Stress Disorder (PTSD) symptoms (Stough, Kelman, 2018).

Despite of all efforts, unfortunately, the disaster and emergency response and recovery phases have not reached a sufficient level for people with disabilities. Literature about the needs of the people with disabilities is limited. More studies should be made for better knowledge and awareness with respect to the needs of disabled people in case of disaster and emergency. This would reduce their vulnerability and make them more resilient.

Response and Recover Phases for People with Disabilities after Disaster and Emergency

It is well-known that disasters and emergencies cause many damages on the individuals in terms of both physical and mental health. Irrespective of type of the disasters and emergencies, the physical and psychological damages they create are similar. It has been observed that the physical problems observed with individuals affected by earthquake and tsunami such as fractures, amputation, cerebral and spinal injuries lead to various psychological effects such as stress, anxiety and depression at the same time and these effects mostly cause posttraumatic stress disorder. In order to avoid such situations, it is significant to follow the preparedness phases for disaster and emergency as mentioned in the earlier chapters. In addition, in such cases, timely and correct response is just as important as the preparedness phase.

After disaster and emergency, response to people with disabilities are divided into two phases: **Acute Rehabilitation Phase** and **Reconstruction Phase**.

Acute Rehabilitation Phase

The acute rehabilitation phase includes the priority responses given in **the first 6 through 12 weeks** after disasters and emergencies (WHO, 2005):

- Identification of the injured people and application of appropriate medical response for saving lives and avoidance of situations that may lead to special requirements;
- Identification of the people with disabilities in the camps and temporary shelters;
- Take care of the people with disabilities also before the disaster and emergency and identification of those individuals who had to move away from their home and/or lost their family and relatives;
- Follow-up of injuries that may cause the people to be in need of special requirements and application of treatments and interventions to mitigate its severity;
- Use of the current medical, surgical and rehabilitation resources of the country and provision of conditions to this end;
- Orientation of the individuals who become in need of special requirements after disaster and emergency to the appropriate rehabilitation centres.

Reconstruction Phase

The reconstruction phase contains the **long-term** operations after disaster and emergency and includes responses that start upon completion of the first 4 months:

- Identification of the individuals who are likely to experience long- and/or short-term functional and physical deficiencies;

- Conducting needs analysis for the people with disabilities and consideration of the existing resources and facilities to be used for fulfilment of the identified needs;
- Arrangement and development of necessary infrastructure for starting medical rehabilitation programs that allow especially psychological aid and auxiliary equipment and devices;
- Start of community rehabilitation services necessary for the people with disabilities to have equal rights for access to the resources to fulfil their basic needs like other members of the society and for perception of them as equal individuals of the community.

As it may be understood from the explanations made above, the rehabilitation phase contains two rehabilitation services, **Medical Rehabilitation** (organization-based) and **Community-Based Rehabilitation** and the combination of them. Consequently, the concepts of medical rehabilitation and community-based rehabilitation should also be clarified with respect to the things that can be done in this phase.

Medical Rehabilitation

Medical rehabilitation covers treatment and healthcare services provided for recovery of the physical and functional capacity and abilities of the individuals after trauma and injuries. It is usually provided by a rehabilitation team consisted of professional such as psychiatrists, physiotherapists, orthoptists and prosthetists (specialists producing orthosis/prosthesis making measurements on the patient). Medical rehabilitation begins soon after the end of trauma care and continues until the person returns to the community. In other words, the functional

recovery of persons with injuries often involves complicated rehabilitation issues, coordination of the input of multiple rehabilitation professionals and treatment of ongoing medical problems. In the developing countries, multi-professional medical rehabilitation teams often do not exist, so special efforts are needed to train local health personnel and family members in performing some of the tasks of various rehabilitation professionals.

Community-Based Rehabilitation

Although physical and functional disabilities lie in the foundation of the difficulties and requirements people with disabilities experience, negative perceptions and attitudes towards them constitute greater environmental barriers. Wrong perceptions and attitudes towards the people such as “they cannot be trained or they can only be trained in isolation from their peers”, “they cannot work or they cannot be efficient workers” or “they cannot live independently” cause them to be marginalized in education, social, economic and political sense.



This situation prevents the people with disabilities to become equal individuals of the community. More importantly, because of such negative perceptions and treatments, the people with disabilities are unlike people without disabilities much more disadvantageous in meeting their same basic requirements such as food, health, education and employment. And a comprehensive community-based rehabilitation program is required for fulfilment of these requirements and maintenance of a quality life.

In the light of these facts, the community-based rehabilitation can be defined as creation of opportunities for the people with disabilities beyond medical rehabilitation for them in order that they may become equal individuals of the community and establishment of a support system to facilitate use of them by the people with disabilities. With respect to these arrangements, certain steps can be taken for the people with disabilities such as increased employment opportunities, more accessible health care, rehabilitation, education and support services, and design of the buildings and transportation vehicles to make them easily accessible for people with disabilities.

The most important characteristic of the supports and opportunities provided by such approach is that people with disabilities can easily have access to these services in their environment. Opportunities and supports which require the people with disabilities to move away from their environment and family to make use of them do not comply with nature of the community-based rehabilitation. For example, while the education services which are given by support of the trained experts and auxiliary technologies and with an integrated approach

Remember !



As the **COMMUNITY-BASED REHABILITATION** requires some arrangements for equal participation of people with disabilities in the community they live in, it actually means restructuring the community itself.

Such type of restructuring may only be possible if the people with disabilities can actively take part in the process and mechanisms that determine their requirements.

Getting their opinions about the decisions taken with respect to their treatment, having a voice in the academic studies and fields related with them and playing a role in the policies and legal arrangements developed about them by participating in politics and similar approaches will make it easy to structure the community-based rehabilitation services as they should be.

comply of community-based rehabilitation, education of the children with disabilities in another city and as isolated from their peers do not match with the nature of these services.

Similarly, provision of only medicine-based treatment services to the individuals with psychological disorders like depression or schizophrenia in mental healthcare hospitals outside their home cities do not match with the structure of the community-based rehabilitation

services. Instead, establishment of the centres which provide psychological support and opportunities of socialization in the location where these people live are more suitable to nature of the community-based rehabilitation services.

In conclusion, it is of great importance to develop a long-term vision for the rehabilitation of people with disabilities. In this respect, an infrastructure combining both medical and community-based rehabilitation services is required because the medical rehabilitation and community-based rehabilitation services are two types of services that complete each other. Provision of such services as soon as possible is quite important to minimize any difficulties that may be encountered in the rehabilitation of people with disabilities after disasters and emergencies.

Rehabilitation Services for People with Disabilities

You may lose your support network and/or your residence and you may experience loss of your family or immediate circle and may become devoid of economic resources as a result of a local disaster and emergency. Because of these damages or even for reasons beyond them, you and your relatives may develop psychological reactions such as **Posttraumatic Stress Disorder** or **Acute Stress Disorder** as a result of being exposed to disaster and emergency.

For compensation of your loss after disasters and access to the services you need, it is important for you to get information about people and organization who work for disaster-related recovery, rehabilitation and resumption of normal life. This chapter gives information about tasks of the related institutions and organizations and scope of the services they provide.

Remember!

**KNOW AND FOLLOW UP
ORGANIZATIONS TO SUPPORT YOU!**

In order to ensure sufficient and timely provision of support and assistance required in disaster and emergency and conduct efficient resource management, it is important to identify degree of disaster and emergency and, in turn, the possible degree of its effect and level of the required support. According to the current practice in our country, basing on the initial and complementary information received from the related Provincial Disaster and Emergency Management Centre (IAADYM), AFAD Presidency evaluates requests for aids according to the type and scale of the disaster and identifies and announces the level of the disaster. In line with the flow of information, the level may be modified afterwards.

In the framework of Turkish Disaster Response Plan (TAMP), the local coordination for response to disaster is conducted by Governor, Deputy Governors and Provincial Disaster and Emergency Management Centre (IAADYM).





The secretariat of IAADYM is undertaken by the Provincial Disaster and Emergency Management (IAADM).

Services of Provincial Disaster and Emergency Management

- Temporary shelter area
- Employment support
- Food and non-food materials support
- Administrative/legal consultancy

Turkish Red Crescent Society

- Food

Ministry of Family and Social Services

Provincial Directorates

- Psychosocial Support
- Social Rehabilitation

Volunteer Non-Governmental Organizations

(they are not main solution partners)

- Psychosocial Support



Get Information about How Disaster-Source Stress May Affect Your Disability!

Experience of a disaster may be traumatic. And stress makes is worse. One or several of the following symptoms may be observed for all people affected by the disaster:

If one of these symptoms affect your functional abilities, consult your physician or a psychiatrist specialized on the effects of disasters and emergencies. While some people do not show any symptom, some others may show delayed symptoms after days, weeks or months after a disaster and emergency. These symptoms may disappear and reappear again with occurrence of events that remind what the individual had experienced. Definitively receive aid from a specialist from disaster and emergency. There may be consultants specialized in this field in your location. (For detailed information, see. *Psychosocial Support Guide for Disasters*).

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Psychological and Emotional



- Anxiety/concern
- Nervousness, restlessness, overstimulation
- Depression, tension, crying
- Anger, resentment
- Emotional numbness, loss of interest in ordinary activities/events
- Sense of isolation, standing apart, alienation
- Feeling guilty for having survived
- Denial or restriction of emotions
- Bad memories about disaster flooding back
- Excessive reaction to fear
- Recurring nightmares about disaster and other traumatic events
- Insomnia or sleep-onset insomnia
- Hypersomnia

Physical



- Headache
- Weakness
- Nausea, upset stomach, and other gastrointestinal problems
- Muscular ache
- Hot and cold seizures, sweating or chills
- Sense of heaviness in the arms and/or legs
- Lump-in-throat feeling
- Chest pains
- Problem in balanced breathing; hyperpnoea
- Tremors
- Burn-out
- Allergy, cold, flu
- Tachycardia

Mental



- Poor concentration
- Mental confusion
- Slowness of thought
- Failure of self-expression, verbal or written
- Amnesia
- Loss of ability related to consideration and decision-making
- Loss of ability related to thinking about options or sense of prioritization

Behavioural



- Unplanned and excessive activity (hyperactivity)
- Burst of anger or increased conflicts
- Loss of impartiality
- Introversion, social isolation, withdrawal from others
- Increased use of alcohol, tobacco or similar substances
- Avoidance of events and places that remind the disaster
- Family-related problems

Appendix

Glossary

Accessibility Standards: Accessibility Standards: Standards regarding accessibility, published by the Turkish Standards Institute.

Accessibility: Accessibility and usability of any product, service, technology or environment by everybody, including people with disabilities and elderly.

Acute Stress Disorder: A mental medical problem that may occur just after a traumatic incident. It may cause a variety of psychological symptoms. If it is not noticed or cured, it may cause Posttraumatic Stress Disorder (PTSD).

Assembly Area: An area to be assembled first in emergency for mustering of the personnel and giving necessary instructions.

Braille or Alphabet for Blinds: An alphabet method developed by Louis Braille in 1821 which is used by the people with visual impairment for reading and writing. It is consisted of six textured dots arranged on a rectangular set-up bearing two columns. Each column has three dots.

Chronic Disease: A type of disease, which is chronic, present in any part of the body, lasting for long time, sometimes unhealable and with limited possibility of treatment.

Disaster and Emergency Kit: Means the kit in which of some emergency supplies and document are made available for use during and after disaster. It should contain copies of important documents, list of telephone numbers, money, clothing, radio, dry food, water, medicine, first-aid kit, hygiene products and similar.

Disaster Management: Total struggle that should be carried out by the community for prevention of disasters and reduction of their damages, giving response to the incident leading to disaster timely, quickly and effectively and creation of a new, safer and advanced living environment for the communities affected by the disaster.

Disaster Preparedness: Means the process where the activities such as planning, education, drills, installation of early alarm systems, stocks of emergency aid materials, raising awareness and knowledge of the public which are required to be done before disaster in order to struggle with disasters timely, quickly and effectively.

Disaster: Natural, technological or human-made incident that create physical, economic and social loss for the whole community or certain parts of it and stop and suspend daily life and human activities where capacity of the affected community is not sufficient. Disaster is not an incident itself, but the result it creates.

Emergency Management: A management process starting just after occurrence of the emergency that aims meeting all requirements of the affected communities timely, quickly and effectively. It is a type of management which is not permanent, starting upon occurrence of an incident considered emergency and ending upon disappearance of the reasons that qualify the emergency.

Emergency Planning: All activities which require planning of all tasks and actions for saving life and property of people and their other activities from results of extraordinary incidents with least loss and damage, prior to occurrence of the incidents and implementation of them during the incident quickly and effectively.

Emergency Preparedness: A process in which the activities such as planning, training, drills, installation of early alarm systems, stocking emergency supplies, making the employees informed and raising their awareness are performed in a permanent and sustainable way prior to the emergencies for giving response to the emergencies timely, quickly and efficiently.

Emergency: All situations and states which are great, but can be coped with local facilities and require urgency. The Law 5902 defines as *"Incidents that stop or suspend normal life and activities of the whole society or of certain parts of it and require emergency response and the crisis status caused by these incidents"*.

Evacuation Plan: A detailed plan to be referred to in case of disaster and emergency which shows which roads and vehicles will be used for evacuation and to where the persons will be transferred.

Event: A situation that occurs and appears; any kind of work, incident and case that draw or may draw attention.

Governance: A management process which involves multi-actor and interactive relations, instead of relations established unilaterally by the classical management structures and is based on the philosophy of collective arrangement and partnership of public-private sectors.

Horizontal Evacuation: Transfer of the persons in case of disaster and emergency to the nearest safe place to a flat at the same level, e.g. fire department or outdoors.

Mitigation Planning: A dynamic and participatory planning process which is discussed together with the strategic planning on national, regional, provincial and settlement basis, combining development targets with mitigation goals for formation of a society with the disaster-sourced damages reduced and living quality and coping capacity enhanced.

Mitigation: All structural and non-structural measures and actions required to be taken before, during and after disaster for prevention and mitigation of the effects of the natural-, human- and technology-sourced hazards and environmental degradations from creating disaster. These actions are long-term works which required to be carried out in cooperation with many institutions and organizations and multi-disciplines in line with a certain target. Mitigation phase starts with the actions in the recovery phase in practice and continued up to occurrence of a new disaster. Actions performed in this phase cover a very broad of application area in scale of country, region and settlement unit.

Ostomy: An artificial opening in an organ of the body, created during an operation such as a colostomy, ileostomy, or gastrostomy; a stoma.

Person with Disability: A person who's some movements, senses or functions become restricted because of an injury or physical or mental disorder. Disability may be by birth or appear as a result of subsequent diseases or accidents.

Place or Area of Refuge: A designated and sheltering place in such a distance that people will not be affected from adverse consequences of a disaster and emergency.

Psychosocial Support: The term "psychosocial" literally means active relation of psychological and social effects that continuously affect each other. In disasters, psychosocial support means the whole multi-disciplinary services which are conducted in each phase of the cycle of disaster including prevention of psychological disharmony/disorders that may appear after disaster, rebuilding/development of relations on basis of family and society; ensuring the affected people to be aware of their own capacities and are strengthened to resume their 'normal' daily life; enhancement of the abilities of the people to cope with/improve/recover in case of possible disaster and emergency that may occur in future and support of the aides.

PTSD: Posttraumatic Stress Disorder is a mental disease that may appear after a traumatic experience. Traumatic experiences are excessively dangerous and terrible situations which pose threat to life and safety of the individual himself/herself or other people. Such situations, for example, include natural disasters, severe accidents, wars, fatal diseases and physical and sexual violence. If the individual himself/herself is a victim as a result of one or several traumatic situations or if she witnesses a terrible incident (e.g. a severe traffic accident) involving other people, posttraumatic stress disorder (PTSD) may occur.

Public Road/Area: A public road/area accessible by the people and a road or area accessible by and open to the people. Roads (including sidewalk), town square, parks and beaches are usually considered public area.

Recovery: All legal, institutional, physical, social and economic activities which are required to be done for meeting needs of the communities affected by the emergency case, resumption of the routines of daily life as soon as possible, development of facilities to deal with possible disasters and creation of a safer living environment for minimum damage to them.

Rehabilitation: An activity of healing, care and training applied for elimination of disability or disease of a person that prevent him/her from performing work and for bringing him/her back to a workable state.

Response to Disaster: A common name of all activities which are started just after occurrence of disaster and carried out for 1-2 months depending on extent of the loss and damages caused by the disaster.

Response: Giving response and assistance for protection of the life of the effected people and fulfilment of their livelihood and basic requirements of them during and just after the emergency.

Route/Way of Evacuation: Abandonment of buildings or an area in case of disaster and emergency and in the framework of civil protection services by using the predesignated roads quickly and regularly and transfer of people and living creatures.

Self-care: Personal care. Everything that a person does to protect and maintain his/her health; e.g. having a haircut, taking a shower regularly, receiving treatment, cutting nails, applying cream to hands, doing physical exercise, etc.

Service Animal: A dog trained to do works or perform tasks to the benefit of person with disability, including people with physical, emotional, psychiatric, cognitive or mental disability.

Triage: Determination of priority for medical intervention in case of disaster and emergency. These priorities are determined according to factors such as chance of living or urgency of the condition of the patient.

Vertical Evacuation: Transfer of the persons in case of disaster and emergency to the nearest safe place to a flat at different level, e.g. fire department or outdoors.

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