Evacuation

Your guide to move away from danger
Introduction

One of the requirements that must be done during accidents and crisis is to evacuate the inhabitants of the affected area. Evacuation process varies depending on the place and time in which it is carried out, as well as the size and type of the incident. In order to have a successful evacuation process, it is necessary to follow the required plan and arrangement, thereby providing necessary training and exercises, taking into account that this process could be applicable.

This training will help reveal the readiness and efficiency of the parties involved in this process.

In addition, an important element should be taken into account, i.e. to have a pre-stated plan for the evacuation process that should be clear and understood for all involved parties, as well as, the flexibility of this plan, which may be subject to changes and amendments if required. With necessity of providing the concern agencies about evacuation and its followed procedures.
The basic civil defense task is to perform a variety of measures, procedures and actions for the purpose of safeguarding and protecting the population and public and private properties from the dangers of crisis, as well as ensuring the execution of such processes regularly at all facilities.

Of the Executive Regulations of Civil Defense Precautions, promulgated by the Royal Decree No. 96/91 state the following:

- The administrations responsible for public facilities and vital institutions, establishments and companies, properties' owners and owners of industrial & commercial activities shall execute civil defense plans and precautions according to the procedures mentioned in annex (1) in coordination with the Directorate General of Civil Defense and other concerned authorities, and such precautions are to be borne by them within a certain period of time with effect from serving responsible persons with a written notice explaining the relevant procedures in this regard.
The bodies responsible for public facilities and vital institutions, establishments and companies, properties’ owners and owners of industrial & commercial activities shall appoint a security & safety person in charge as mentioned in annex. That person in charge will have an earlier experience acquired in the safety and security services and shall be qualified to assume such duties and be dedicated for this purpose in the public institutions and vital establishments, however as concerning private establishments the devotion to do that shall be subject to the following:

1 If more than 50 persons work for the establishment or the number of visitors and employees together exceed (75) persons at any single time.

2 If the establishment is an active production source of the basic requirements and needs of people. Other than that, it is possible to assign one qualified official to assume security and safety roles in the establishment in addition to his original work.
**Definitions:**

**Crisis:**
It refers to a sudden unexpected situation with agitation and violence that is short in terms of time. Therefore, it is a critical period of unstable state that entails the occurrence of influential results.

**Disaster:**
It refers to the event or nature of humans that results in or entails suffering due to huge loss of lives or public or private properties or both as the required abilities to confront such occurrences exceed the capabilities of relevant administrations in different areas.
Civil Defense Precautions:

They refer to all procedures and methods aiming to secure safety of public, to avoid crises and to remove their effects.

Public Establishment:

It refers to any activity undertaken by the administration itself or an activity assigned to a company, establishment or individual to manage under the administration supervision and directions with a view to provide general services.

Evacuation plan:

It refers to the set of that the pre-stated precautions and measures to deal with certain circumstance occurs to the establishment or the enterprise. The management of this plan differs according to the facts of each event and the expected effects and results. The workers and attendants in these places are moved away from the places of danger to safe places through this plan to protect them from damages.

Evacuation:

It refers to moving the affected or under risk persons to the nearest safe place away from the dangers, in addition to providing the required care for those persons and providing them with the necessary life requirements, whether the evacuation is voluntary or compulsory, according to the plan prepared for it.
Evacuation goals:

1. To protect the lives from the different risks (natural or man-made).
2. To secure the national wealth and property by moving them away from sources of danger, whether they are (economic, animal, scientific, historical ... etc.).
3. To ensure social, psychological, health and family stability, through sheltering the relocated persons and those whose properties are affected, and providing them with all the methods of protection, safety and security.
Phases of Evacuation:

It is divided into four phases:

- Warning & Alarming
- Evacuation of affected persons
- Sheltering the affected persons
- Reinstatement
Evacuation may be optional or mandatory. It is implemented entirely for all the inhabitants or partially for some of them, and it is divided into three types:

1. Optional Evacuation:

Any person always tends to move away from the places of danger, on the basis of the natural disposition be cause of the love for life, when he feels threatened. He, out of choice, moves away from such places in which he feels the danger. He is free, without the interference of the competent authorities, to do the following:

- To determine the time of evacuation.
- To determine the means of transport.
- To determine the place to which he will be relocated.

There is no doubt that the State encourages such kind of evacuation for many reasons, but it plays a positive role in the following matters:

1. To raise the consciousness of the persons regarding the dangers they may face in case of staying in the area.
2. To provide the means of transport and facilitate the traffic.
3. To maintain the morale of the people and to avoid the spread of the malicious rumors.
4. To notify the individuals and organizations who are required to stay in the area to ensure the continuity of the services and vital facilities.

2. Mandatory Evacuation:

This type of evacuation refers to the compulsory evacuation by the order of the competent authorities, and in some states, the one who violates that will be subject to penalty.

This evacuation, named as evacuation according to size, is divided into two kinds:

1. Partial evacuation: This refers to the evacuation of (a certain category of inhabitants) from an area or a part of this area.

2. Overall evacuation: it refers to the complete evacuation of the area.

3. Evacuation according to duration:

This kind of evacuation, according to its duration, is divided into two kinds:

1. Temporary evacuation: This is the easiest known kind of evacuation, and it does not exceed very few hours. It takes place when fearing the lack of safety for the establishment. The establishment may not return unless after the announcement of the competent authority allowing that.

2. Permanent evacuation: this kind of evacuation does not occur unless in cases of great danger. The competent authority announces the evacuation of the inhabitants completely to avoid mass destruction, making it difficult to turn to that place before a long period.
The evacuation process shall be done shortly within the least possible time. The estimated time of evacuation shall be as follow:

- **1 min** from the buildings structured by non-fixed elements or those containing flammable materials.
- **2 min** from the structured buildings or those containing combustible items making smoke, which represent the majority of buildings.
- **3 min** from the buildings structured by fixed elements, which are not exposed directly to fire.
Evacuation cases:

The following cases require carrying out the evacuation of the establishment:

1. An explosion.
2. Flare-up.
3. A bomb threat
4. Leak of hazardous chemicals
5. Air pollution
6. Hostile activities
7. Spread of a pandemic virus or infection.
8. Floods and storms that may affect the establishment/region.
Means of evacuation:

There are several means of evacuation that are used for the evacuation of individuals that are either fixed or mobile, which include but not limited to:

1. **Fixed stairs:** buildings’ stairs, whether internal or external.
2. **Mobile ladders:** the ladders that can be moved from one location to another, such as those found in vehicles, and which can reach to high distances, or common ladders.

1. **Transportation means:** various kinds.
2. **Emergency exits:** (corridors / doors / windows).
Types of evacuation teams

Evacuation teams are divided as follow:

First / According to the domain of the team:

1. Comprehensive evacuation teams:
   It means that all teams have more than one goal, such as security, technical or health goal, etc., and these kinds of teams are often of different domains.

2. Security Evacuation teams:
   It aims to maintain the security and protection of persons, property or rights from the external or internal attack due to the presence or the possibility of a security flaw in the region. At the same time, members of the evacuation team or most of them include security persons.

3. Health evacuation teams:
   Their mission is to maintain the health of persons and living organisms from of bad health condition or environment, or for the spread of a particular epidemic, and in this case, the evacuation team includes personnel involved in the health field.
Second / According to the nature of work area:

1. **Mountain evacuation teams:**
   Mountain evacuation teams: They include individuals with high abilities and fitness to enable them to climb mountains and rugged areas in order to reach those affected persons, and then help them to be evacuated.

2. **Desert evacuation teams:**
   They include individuals with high ability to withstand high temperatures and severe drought.

3. **Naval evacuation teams:**
   They include individuals with experience in swimming and diving, and can withstand high humidity.
Factors for evacuation success:

- To design aspects of security in the establishment.
- Warning and road network planning.
- To determine the assembly points.
- Time, coordination and follow-up.
- To design suitable models of evacuation and deportation.
Planning in Evacuation Process

The importance of planning in the process of evacuation mainly aims to achieve the security and the sense of security and safety for individuals, and to build the confidence and trust in them, and not only this but also to protect them from the dangers and keep them safe. **Figure 1 shows the important elements of planning:**

- To determine the appropriate locations for evacuation
- To identify clear goals for work and how to implement them.
- To help coordination between the participating parties and other associated works on the other hand.
- To achieve psychological security for individuals and groups.
- To determine the steps, stages, types and duration of the evacuation process. To achieve control and follow-up.
- To determine the appropriate locations to accommodate those affected individuals according to their number and their specific traditions.
Factors of success and effectiveness of planning

1. Selection of competent individuals.
2. Accuracy of the data.
3. Participation of responsible persons in planning.
4. Continuous planning.
5. Immediate response.
6. Flexibility and realism.
7. Clarity and understanding.
Any building of any kind, whether residential, commercial, educational or sports ... etc., especially when accommodated or visited by large number of people, shall be ready for any emergency that may occur and the consequences of evacuation. Therefore, an evacuation plan shall be prepared for each building to provide those inside it with the protection against any danger, which puts the most appropriate methods for their evacuation and determines the tasks and responsibilities for those involved in the evacuation process. The main elements for preparing the evacuation plan are as follows:
1. **Location and description of the building:**
   It means to state the district and street wherein it is located as well as its description, in terms of size, number of floors and type of building.

2. **Number of persons inside the building:**
   whether they are employees or inhabitants.

3. **Alarming devices available in the building:**
   To determine the type and method of alarming (alarm bells, automatic alarm, smoke and gas detectors, others, etc.)

4. **Fire extinguishing devices available in the building:**
   To determine the type of fire extinguishing device (water pump hoses, fire extinguishers of any kind, automatic extinguishing system).

5. **Duties and responsibilities:**
   To identify the duties and responsibilities of those in charge of the evacuation process, including employees or those inside the building.

6. **Assembly areas:**
   To identify the assembly points outside the building to which those inside the building will leave at the time of evacuation.
7 Emergency exits

To state the numbers & location of all the roads (corridors, doors and stairs). This should preferably be shown on a sketch on each floor.

8 Building Sectioning:

It means the sectioning of the building as per the number of emergency exits, so that every section or floor should have a certain number of emergency exits.

9 Establishment Evacuation Team:

This means to assign a certain team of employees of every section or floor to evacuate the people existing in the building and supervise the same. Moreover, it is important that there should be a similar team to perform the operations of rescue and fire-fighting until the arrival of the official authorities.

10 Method of Plan Implementation:

It is the method where the required steps for the evacuation are determined, from turning the alarms on until employees and people existing inside the establishment are gathered at the specified assembly points, hence moving them to the allocated locations.
11 Approval and Communication of Plan:

The plan should be communicated to all departments and divisions within the establishment for necessary action. Furthermore, drills for the plan should be conducted twice a year at least to make sure that all employees understand its content.

12 Results Evaluation:-

It is the analysis and evaluation of the plan and performance of the teams in charge, in order to determine the deficiencies and to benefit from the problems that may appear in order to develop urgent solutions to avoid them in the future.

Always make sure to keep emergency exit passable in anticipation of an emergency state.
First

Building Teams and Commissions

Security and Safety Commission

consists of:

- Chairman of the Commission
- Assistant Chairman of the Commission
- An Employee
- An employee has the willingness to do the job
- An employee of every floor of the establishment
Tasks of Security and Safety Commission:

1. Supervising teams and following up their works as well as making sure of the tasks and roles vested in them.

2. Providing safety requirements, including means and equipment to encounter the potential accidents.

3. Preparing the emergency and evacuation plan for the establishment in coordination with the Public Authority for Civil Defense and Ambulance.

4. Coordinating with the Public Authority for Civil Defense and Ambulance concerning conducting drills for the evacuation and emergency plan from time to time to make sure that the teams are fully aware of their duties.

5. Making sure that all occupiers of the establishment are fully aware of the escape exits and assembly points.

6. Trying to stop work promptly in case of any emergency.

7. Issuing orders to stop operation of the mechanical forces and cut power and gas sources in the places of danger inside the establishment.

8. Preventing the employees from staying at the establishment for the purpose of getting their personal belongings.

9. Issuing orders to transfer all valuable things and documents.
Tasks of the Commission Chairman:

1. Preparing the establishment's evacuation plan in coordination with PACDA, Safety and Security Officer in the establishment.
2. Being familiar with the safety equipment available at the establishment in order to keep them permanently valid for use and training.
3. Knowing the requirements of evacuation, including means and equipment.
4. Coordinating with PACDA to set and implement training program to train teams, exchange visits and giving awareness lectures.
5. Direct supervision of teams when dealing with any incident from the beginning until the arrival of official authorities.
6. Performing the determined duties according to the elements of evacuation plan approved by the PACDA.
7. Assisting PACDA teams and other concerned agencies in their duties and providing the necessary information in case of any incident.
8. Taking the responsibility of commanding incidents with all its risks in the establishment from the beginning until the arrival of the specialized teams.
Duties of Assistant Chairman of Commission (Security & Safety Officer):

1. Following up the specialized authorities within the establishment, in order to provide the supplies of safety and security and the necessary control equipment for the implementation of the evacuation plan.

2. Informing the Commission Chairman of any accident occurring inside the establishment.

3. Assisting the General Supervisor (chairman of commission) in incident management works during the evacuation.

4. Allocating a record, wherein all types of safety supplies and their maintenance dates, exercises of teams personnel, training courses, accidents, and minutes of meetings related to safety, are written down.

5. Developing a practical plan for training on evacuations during normal circumstances in coordination with the PACDA and concerned agencies, to be implemented at least twice a year.

6. Training the teams on how to perform their duties in dealing with the danger at the beginning, how to use the machines and equipment of firefighting, communication devices and evacuation implementation.
Teams’ Divisions & their duties

**Fire Fighting Team**

1. Extinguishing small fires using available fire-extinguishers and fire hoses until the arrival of the teams from PACDA.
2. Assisting PACDA teams.
3. Reporting any dangers of fires.
4. Cutting the establishment’s power off.

**Rescue Team**

1. Carrying out simple rescue operations until the arrival of teams of the Public Authority of Civil Defense and Ambulance.
2. Participating in rescue operations when so required by the Public Authority for Civil Defense and Ambulance.
3. Reporting any critical cases that require quick and urgent rescue.

**Security Team**

1. Securing the building and maintaining the public order.
2. Preventing the entry of any non-specialized persons to the establishment.
3. Not leaving the establishment gate without any guards in order to protect the establishment until the arrival of police, as well as assisting the security forces in facilitating the entry of the specialized teams and authorities upon request.
4. Waiting the specialized teams and guiding them to the incident location.
Awareness Team

1. Raising the awareness of citizens about alarm devices and required precautions to be taken when hearing these alarms.

2. Warning public in case of fire or any emergency.

3. Monitoring the situation and not to rush, since there are some incidents that require people to stay in their locations.

4. Educating public and spreading the awareness among them concerning the risks facing them.

5. Guiding the concerned authorities upon their arrival.

6. Preparing publications and leaflets containing steps and instructions to be followed in case of fire or any emergency.

7. Writing instructions about actions to be taken in case of emergency and affixing it in a prominent place.

8. Educating public about the duties to be done in case of any emergency and how to report to official authorities.
1. Evacuating citizens to safe locations (assembly point) specified in the plan, through the correct ways on which they have been trained, and through the available emergency exits and ways of survival in multiple and different directions.
2. Being familiar with the emergency entrances and exits.

3. Participating in evacuation operations with the PACDA teams.

4. Find the missing people and rescue those besieged inside the establishment.
5. Preparing lists of names of the injured and submitting them to the head of the team.

1. Assisting other teams according the work plan prescribed for them.
2. Heading to the incidents location upon hearing the alarm and keeping the citizens away from the dangerous location.

3. Evacuating the establishment using the known means of survival and the correct manners agreed upon, through multiple exits, in different directions and to prevent overcrowding at one corridor or exit.
4. Enumerating citizens and making sure of no missing, as well as reporting the missing people promptly.
Ambulance Team

1. Providing the first aid to the injured.
2. Transferring the injured to safe places or hospital if necessary.
3. Classifying the injured as per the type of injury.

Shelter Team

1. Providing the necessary supplies for the people present at the assembly point.
2. Enumerating the people present at each assembly point, and submitting the number to the security and safety officer.
3. Enumerating the missing or injured people, if any, and informing the security and safety officer.
Model demonstrating safety requirements & assembly points in the facility
Public Instructions

There are instructions for the evacuation that should be known by public in order to make the evacuation more easy. Meanwhile, These instructions achieve the desired objectives, as follows:

1. To stop work upon issuance of orders of evacuation alarm.
2. To act with calmness without confusion and to possess.
3. To listen to the available media to receive further instructions depending on the circumstances, new variables and new reports.
4. Upon issuance of the evacuation order, all people should promptly head towards the pre-stated assembly points or look for and move to them.
5. Not to overcrowd in the streets and to evacuate them for various emergency machines and equipment.
6. You should be careful and cautious at all times to be familiar with places and emergency equipment, particularly at night.
7. Upon issuance of order to evacuate the establishment, it must be evacuated promptly without hesitation.
8. To follow the tips and instructions issued by the competent authorities.
9. If orders are issued to move to a specific location, you must move to it only.

10. To use ways and paths specified for walking, which are announced through the media and do not use other ways and paths.

11. To continue to listen to the available media, to know any new instructions and orders.

12. To identify the shelter site and move to it.

13. To cut the power supply and source of gas and water before leaving home.

14. To remember to take important and official papers, documents, and precious stuff such as (personal identification, jewelry, money, personal weapons ... etc).

15. To take medicines to be administered, especially for those who are suffering from a heart disease or some difficult diseases for which medicines must be taken regularly and accurately.

16. When moving, whether on foot or by car, means of safety must be available and the following must be made sure of:
   ▶ Leaving the place early as possible.
   ▶ Making sure that there is enough fuel in the car.

17. The number of every group should be not less than Six (6) members, and one of them should be responsible for the group.