UNITED ARAB EMIRATES
THE SUPREME COUNCIL FOR NATIONAL SECURITY
National Emergency Crisis and Disasters Management Authority

الإمارات العربية المتحدة
المجلس الأعلى للأمن الوطني
الهيئة الوطنية لإدارة الطوارئ والأزمات والكوارث

Your Guide for Emergencies

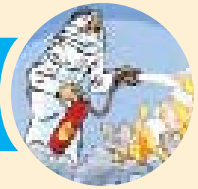
1. During Natural Disasters and Power Outage

2. During War Emergencies

3. Protection Against Acts of Sabotage

4. Administering First Aid

5. Protection Against Fires



6. Caring for People with Special Needs

“Preparedness is the most important step towards protection”

2014

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Lightning

Lightning is a dazzling light that suddenly appears in the sky in turbulent weather. It is a massive natural electrical discharge resulting from the collision between two clouds, one with negative electric charge and the other with positive electric charge. The light is followed by a booming sound known as “thunder”. Together, lightning and thunder form a “thunderbolt”.

Lightning is usually harmless because most of its charges do not reach the Earth. But in some cases, if it is strong enough, it can uproot a tree, destroy a chimney or even kill a person or an animal.

However, it has been shown that most of those who were struck by lightning were usually taking shelter under a tree, and this is the most dangerous thing to do when a thunderstorm breaks out because trees and high-rise buildings actually conduce thunderbolts. Consequently, the roofs of buildings should be equipped with lightning rods; metal chains that absorb electricity and divert their fatal charges to the centre of the Earth.

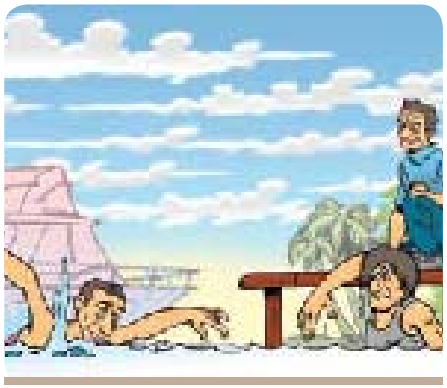
Lightning rods absorb the charges and scatter them peacefully into the ground, away from the building. The massive energy of a thunderbolt is capable of destroying anything that stands in its way.

How to avoid the risks of lightning

When a thunderstorm is brewing in the area you are in, proceed with caution. Find a safe shelter and avoid any contact with metallic objects or hiding under trees.

In case you are at home

- Avoid taking a shower, because the pipelines and bathroom installations may conduct electricity from lightning.
- Avoid using telephones with cords, except in case of emergency. Cordless and cellular phones are safer to use in such conditions.
- Unplug electric devices and equipment (such as computers) from power sources and turn off your air conditioners because the energy resulting from lightning can cause serious damage.



Head inside a building or a vehicle

- In open spaces or forests, stay on lower grounds, for example in a place where shrubs grow densely.
- In open spaces, curl up by crawling on the floor.
- If you happen to be out at sea, head to the shore.
- If you are driving a bicycle, motorbike or a golf cart, step away from it.
- If you are gathering with other people, go your separate ways.

When thunder roars do not...

- Use the phone and electric devices and equipment.
- Stand under high trees.
- Stay outside or in elevated places.
- Touch metallic objects.
- Get close to metal fences, pipes and railways.

Floods

Floods are a natural phenomenon caused by the rise in the level of watercourses; the faster the water flow, the greater the floods and vice versa. A flood is the overflowing of a large amount of water beyond its normal confines over what is normally dry land. Floods can also occur due to the ebb and flow of tides. Floods are often caused by the following:

- Heavy rainfall.
- Strong thunderstorms and cyclones.
- Dam collapse releasing great quantities of water.
- Sudden rise in sea level as a result of heavy rain or thawing snow on mountain tops, following earthquakes on land or at sea (tsunami…) or a change in the water pressure at the bottom of the oceans.

Most floods are harmful, because they are potentially damaging to people and property (houses, cattle, cars...) as well as public utilities (buildings, bridges, tunnels, telephone lines, electrical power...). They also cause erosion to the upper layer of the soil. Floods often claim many lives due to drowning and electric shocks or even epidemics and diseases that tend to spread due to the potential pollution of water. Floods can also lead to severe food shortage, particularly in inaccessible areas besieged by water, or as a result of the submersion and destruction of crops.

Experts and meteorological centres can predict floods by monitoring the different meteorological fluctuations, and can consequently issue warnings about possible dangers. However, it is imperative for people to take individual and collective precautionary measures to avoid any serious consequences. Speedy and efficient evacuation must be at the forefront of such measures.

Evacuation and moving to elevated areas

In case you are at home, follow the below procedures:

- Stay put but follow up on the latest developments on the radio or on television and be prepared to carry out the evacuation instructions issued by the authorities (the police for instance).
- If staying at home gets dangerous, remain calm and call the police (provide them with the necessary information) for help and immediate evacuation.
- Head to an elevated area, far from watercourses, torrents, valleys, dams and mountains.

In case you are in a car:

- Be careful and cautious, and pay attention to the flood indicators.
- Never get adventurous for this might kill you and other passengers in your vehicle.
- Do not drive past security barriers; they are there for your own safety.
- If your car gets stuck in an area where the water level is quickly rising, leave it at once and head to a more elevated area.
- Call Civil Defence or the police if you need any help.

Earthquakes and tremors

Earthquakes are a natural phenomenon that cannot be predicted or avoided. However, there are precautionary measures that help to minimise their consequences and damages during and after their occurrence. Earthquakes are quick earth tremors followed by aftershocks called "seismic waves" that are due to the breaking and shifting of rocks in the centre of the Earth as a result of geological effects leading to the movement of the tectonic plates. Earthquakes can occur as a result of volcanoes or the sliding of the Earth's layers.

Earthquakes can lead to the cracking of the Earth, the depletion of springs or the appearance of new ones. They can also cause elevation or sinking in the earth's surface as well as high waves below sea level (tsunami), in addition to their devastating effects on buildings, transportation networks and utilities. The magnitude of an earthquake is measured on a scale of 1 to 10 known as the Richter scale. An earthquake with a magnitude of 1 to 4 is considered "small with little damage to people and property. A 4 to 6 magnitude earthquake is considered "average" with potential damage to houses and buildings. "Big" earthquakes, on the other hand, are of a magnitude of 7 and over on the Richter scale and are capable of destroying entire cities or areas, razing them to the ground or burying them underground. Earthquakes experienced in the United Arab Emirates to date haven't been local. They were all aftershocks from earthquakes that occurred elsewhere in the region, and no cases of extremely high sea waves have ever been registered. However, in case any seismic activity that may represent a hazard to the country were detected, it would be dealt with immediately in coordination with the National Centre of Meteorology and Seismology. Indeed, the alarm will be sounded and the relevant authorities and the police will activate the emergency plans that have been put in place for such incidences.

When an earthquake occurs…
In case you are in a building

- Stand under a doorframe or crouch under a solid table.
- Stay away from windows, glass and shelves as well as anything that might fall from above and harm you.
- Be careful of gas leakage and do not light candles, matches or any other sources of heat during and after the earthquake.

In case you are outside

- Stand away from trees.
- Stay in an open space until the earthquake stops.
- Stay away from upper or lower passageways.
- Stay away from buildings and outer walls.
- Stay away from high lampposts as well as electricity and telephone lines.

In case you are in a car

- Stop as soon as you safely can.
- Stay away from tunnels and bridges, and do not get out of the car.

In all cases:

- Try to remain calm, do not panic and try to help those around you.
- Avoid calling the emergency number (999) to reduce pressure on the lines.
- Listen to the radio or the TV to follow up on the latest news and developments.

After the earthquake...

- Search for the injured, help them out and give them first aid, or get help by calling Civil Defence or the police if need be.
- Search for the missing and check on your family and friends.
- Do not walk around barefoot.
- Watch out for gas, water and sewage leaks and report them.
- Check for broken wires and unplug electrical appliances from power sources.
- Clean up any toxic leaks.
- Listen to the local news and follow instructions.
- Try not to use the telephone.

- Check the building to ensure that there are no new structural defects, such as cracks in the walls, floors, balcony railings and columns, and report any such defects to the relevant authorities (Municipality Department/ Building Inspection Section, if you are living in a private or public building, or the maintenance units in your area).

In case evacuation is necessary

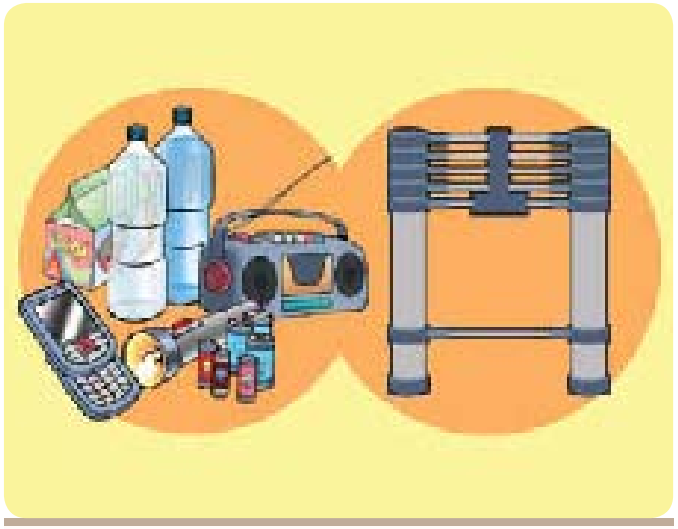
- Do not use the elevators; leave in an orderly manner using the staircase.
- Before leaving your house:
  - Turn off all lights and electrical appliances.
  - Close all gas sources and water faucets.
  - Gather all your family.
  - Get your previously packed kit.
  - Close the door, and insure your house.

P.S.: The evacuation of a building becomes necessary in the presence of clear structural defects. In case no new cracks are found, you can remain in the building.

In case you find yourself trapped under rubble:

- Try to lean on a nearby wall where rescuers can easily reach you.
- Cover your nose and mouth with a piece of cloth or with your hand.
- Do not use a lighter or light a match.
- Use a whistle (if you have one available) or shout as loud as you can so that rescuers know where you are.

Survival kit for earthquakes:



- Sufficient amount of drinking water as well as canned and dried food to last a whole week (to be used and replaced in order not to perish).
- A can opener and a matchbox.
- A first-aid kit containing the necessary first-aid tools and medicines for the whole family.
- A first-aid manual.
- A small radio, a torch and spare batteries.
- A fire extinguisher and a smoke detector.
- An adjustable wrench to repair gas or water leaks.
- A portable escape ladder.
- Police, Emergency and Civil Defence telephone numbers.

Tips to increase your chances of survival if you are trapped under rubble

General directives in case you are trapped under rubble:

- Protect your head and face from shattered glass or objects that might fall from above by covering your head with a coat, a blanket, newspapers, a box, etc.
- Stay away from hazardous areas or unstable objects and, if possible, wear a pair of thick shoes to protect your feet from shattered glass.
- Lean on any wall free of glass windows or installed shelves or crawl under a counter, desk, solid table or firm bed where you will have space to breathe and will be protected from falling objects.
- If you are in a safe place, stay put. Do not use the staircase or the elevators because there is a high risk of rubble falling from the staircase or exits getting blocked or of power outage occurring in the elevators.
- Use a flashing light to attract attention and do not turn on the lights or light matches, fires, gas ovens, etc. unless you are sure there are no risks of gas leaks.
- If you are trapped under rubble, move your fingers and toes from time to time to ensure the circulation of blood and to prevent thrombosis.
- Keep your spirits up by thinking of your loved ones. This will help you fight for life and will keep you strong.
- Stay calm, remain alert and answer the rescuers' calls. Do not yell unnecessarily as this will only deplete your energy.
- Attract the rescuers' attention by using a flashing light, or by yelling if you are sure that someone is around.
- Eat food and drink water from the fridge, if accessible.
- Cut down on your food consumption so that you have food for a longer time.
- Be careful around shattered glass and rubble.

High waves: “Tsunami”

A tsunami is a series of high, powerful and rapid waves that form in the sea or next to the shore. They can reach a height of up to 30 meters, and several hundreds of metres in length at a speed of 800 km per hour. As a result of the huge quantity of water and energy generated by its movement, the tsunami usually has devastating effects, particularly when it hits the shore. The difference between tsunami waves and normal waves is that a tsunami gets its energy from the movement of the Earth whereas a normal wave is driven by wind.

Tsunami waves are frequent in the region of the Pacific Ocean, where more than half of the world’s volcanoes are found. When this phenomenon occurs, the coastal areas are hit, sometimes without warning, by very forceful waves.

A tsunami is caused by severe turbulences below the surface of the water, such as earthquakes, landslides, movements at the bottom of the oceans and underwater volcanic eruptions, in addition to nuclear explosions. In most cases, a tsunami is due to earthquakes that occur at sea and lead to deep seafloor movements. Tsunami waves move from their starting point in all directions through vast spaces. The tsunami wave starts unnoticed in deep water but gains height as it reaches the shore.

A tsunami cannot be prevented nor accurately predicted, even if earthquake indicators show its actual location. In this case, the role of geologists, oceanographers, and seismologists is limited to issuing warnings about its impending occurrence. However, many systems are currently being developed to minimise the effects of tsunamis.

Is the United Arab Emirates prone to tsunamis?

The UAE is blessed with its geographical location that protects it from tsunamis, as, to a certain extent; it is far from tsunami-prone regions. Hence, the probability of the country being directly hit by a tsunami is weak. Nonetheless, the Emirates have established the “National Centre of Meteorology and Seismology” to identify any such cases and risks.

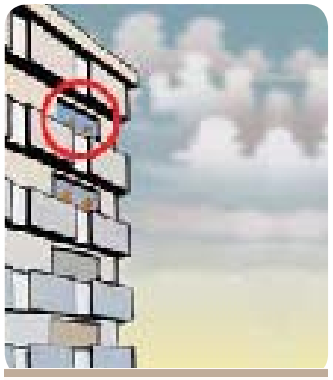
Sudden withdrawal of the sea

Do not just stand there, verify the warning signs that should be heeded

- In case you are at the beach or next to the sea and feel a tremor beneath you, immediately head to a more elevated area.
- Do not wait for a tsunami warning to be announced.
- Head to an elevated area as fast as possible, because the sudden withdrawal of the sea level resulting from the withdrawal of the coastline, by one kilometre or more, is considered a precursor to a tsunami.
- Do not get close to the shore to check if it is a tsunami; get away immediately.
- In case evacuation instructions are issued, execute them at once.

What to do in case you are taken by surprise by a tsunami?

- Head quickly to an elevated area.



- Do not stay in a house or a building located in a low coastal area in case of a tsunami warning, because they are not safe.
- If you do not have enough time to head to inner land or to an elevated area, go to a protected building where elevated floors of high buildings constructed with reinforced concrete can provide you with a safe shelter.

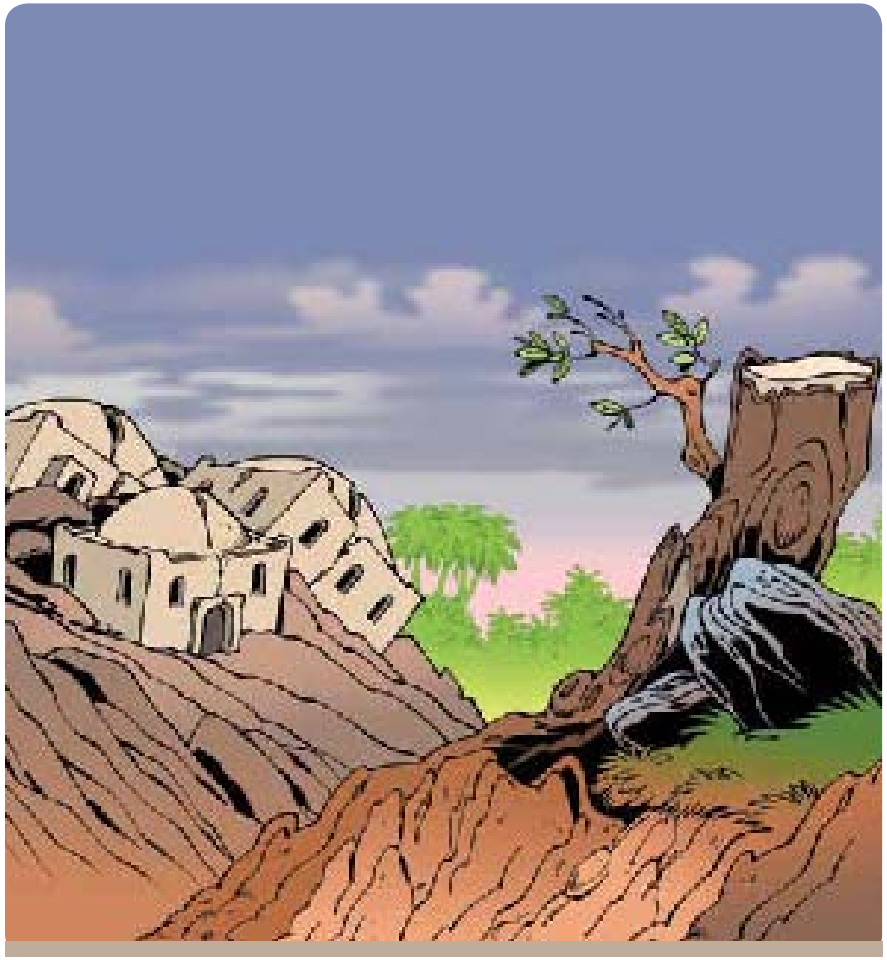
- If you are on board a boat or ship and do not have enough time to reach the shore, move your boat to deeper waters.
- If the weather is turbulent, it might be safer for you to leave your boat on the dock and head to an elevated area.

- Wait for the “end of emergency” signal and get away from the area until it becomes safe.
- Do not be deceived into thinking that the danger has subsided when one wave has hit the shore. A tsunami is not just one wave, but a series of waves that differ in size.

Landslides

A landslide is the displacement of huge soil clods along with their components such as soil, rocks and trees. Landslides usually occur on top of mountains, in elevated areas, in the basins or sides of valleys and on slopes. They are of two types: downward and translational. The presence of water is not a requirement for such displacements. Rather, landslides occur when one or more of the following conditions are met:

- Gravity and presence of an unusual or tilting rock structure.
- Steep mountains, especially manmade slopes when building roads in mountainous regions.
- Saturation of the land with water from heavy rains or the thawing of snow and ice, and leakage from reservoirs, irrigation canals, etc.
- During or after earthquakes or volcano eruptions.
- Very high walls surrounding river gorges or glacial valleys.
- Removal of supporting strata or sub-layers of rocks, by natural processes or human activities, such as tunnel digging and mining.



Precursors of landslides

- Appearance of new cracks, imbalance, tilting or protrusions in supporting walls.
- Downward tilting or movement of trees, fences and electricity and telephone poles.
- Changes in the nature of inclination and water drainage pattern, such as the water collected behind the retaining walls or flowing through the ground's surface.
- Erosion or displacement of plants and the upper layer of the soil on a slope.
- Elevation of the Earth crust or the bottom of a slope.
- If any of the above occurs, the landowner should get a professional engineer to inspect the land and suggest corrective solutions.

What to do in case of landslides?

- In case of landslides followed by rubble, evacuate the area immediately, if it is safe to do so. Do not forget to take along your previously packed emergency kit.
- Remain calm and be careful, listen to the radio or the television to follow up on the latest news on the emergency.
- Turn off gas, electricity and water sources that might cause further damage.
- Inform your neighbours.
- Be careful especially when driving your car.
- If you are stuck, ask for help or call 999 and wait for rescuers to arrive.

After the landslides...

- Stay away from the area and from damaged buildings and electricity lines.
- Immediately report any accidents or legal matters to the police.
- Report any structural defects in private or public buildings to the municipality or to competent authorities.
- Direct the rescuers to the locations of people who are injured or stuck near afflicted areas.
- Try to obtain and abide by information provided by the competent authorities before residing in the damaged houses.
- Keep listening to the television or to the radio to get the latest news on the emergency.

Power Outages

A power outage is a short- or long-term loss of electric power. It may be partial or complete and is usually due to many reasons, of which:

- Emergency breakdowns in power stations.
- Failure in electricity lines, sub-stations or any part of the distribution system.
- Short-circuit.
- Overload of the electric grid.
- Human error or malicious act.

Power outages are a rare occurrence in the United Arab Emirates; however, we should be prepared for all possibilities. The following are a few measures to be taken in case of a power outage:

- Take the radio and torch from the previously packed emergency kit.
- Turn on the radio to get the latest news. Radio news will be the most efficient way to provide the public with the latest developments.

- Call the maintenance unit at the Civil Defence or the Municipality to report people stuck in elevators during power outage. Do not attempt to rescue anybody stuck in an elevator because you are not properly trained or well-equipped to do so.
- People who are stuck in elevators should remain calm, press the "warning" button and wait for help to arrive.

- Avoid calling Civil Defence or police hotlines unless the situation is life threatening or if there is a need for a rescue team.
- If you need to use your car, drive slowly and be careful to other people on the road.
- Make sure to keep your headlights at all times.

Stocking up on basic food supplies

Dealing with an emergency will undoubtedly be much easier for both you and your family if you regularly stock up on basic food supplies. This is a wise habit, because you never know when a case of emergency will occur. The following list is just an example, knowing that you should take into account your own needs and priorities when stocking up on food supplies. As for the quantity of the supplies, it depends on the size of your family.

Approximate food consumption per person for two weeks:

- Rice: 2.5 kg+ 1 kg
- Cooking oil: 1 bottle (±250 g)

- Dates
- Canned food: meat/fish/ legumes, 7 different cans (±400 g per can)
- Canned vegetables: 7 different cans (±400 g per can)

- Dry food: Different kinds of biscuits, 2 boxes (250 g each)

- Drinks: Powder milk
  - 2 containers (900 g each) for children under 6 months
  - 1 container (900 g) for children from 7 months until 6 years
  - Sugar: 1 bag (500 g)
  - Malt drink, 1 box (±400 g)

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