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
Vision
Excellence in the management of crises and emergencies

Mission
To enhance the UAE’s capabilities in managing crises and emergencies, setting the requirements of business continuity, enabling quick recovery through joint planning and coordination and through communication at the national and local levels in order to preserve lives and property.

Objective
To implement the state policy on the required procedures for the management of crises, emergencies and disasters
Your Guide for Emergencies
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Preamble

Protection is a set of cognitive principles, values and practices that people resort to when they face hazards or accidents or when they expect their occurrence. The purpose is to ward off danger or, in case it occurs, to minimize its intensity and adverse effects.

Effective protection starts with preparedness which constitutes “the most important step towards protection” as well as the foundation of protective measures which, if applied accurately and consistently, lead to better protection of both people and property, and hence of the country and its assets.

In this guidebook, we present you with a series of concepts and methods which will help you, in different cases of emergency, to avoid the dangers that might threaten your own life and safety as well as the life and safety of your family and environment, or that you might need to address while on the road, at school or at work.

This guidebook also shows you how to protect your property as well as the individual and collective property of others, through instructions and advice that correspond to the different types and natures of hazards likely to occur in times of peace, war, turmoil and disasters.

Additionally, it introduces you to the best and most recent methods of protecting yourself and helping others through a series of first-aid instructions on how to stop bleeding, treat burns and fractures or resuscitate cardiac arrest or suffocation sufferers.

This guidebook offers advice on how to ensure personal safety during fires and how to deal with various building components such as installations and equipment.

You can learn how to deal with emergencies in times of peace, i.e. natural disasters and sudden power outages, and how to stock up on food supplies.

It also offers instructions on measures that should be taken in times of war to avoid crises, in terms of consumption levels, blood donation, warnings, shelters and personal defence.

In particular, the guidebook focuses on the importance of a “previously prepared emergency kit”, and helps you to avoid potential chemical and biological terrorist threats as well as bomb attacks.

Finally, it explains in detail how to care for people with special needs in cases of emergency.
## 1 – Natural Disasters And Power Outages

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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 doorway 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)
2 – War Emergencies

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War is against human nature because it leads to casualties, destruction and poverty, and spreads fear and unrest among all people. Nations are not war-inclined by nature, but rather tend to avoid war by all means. For this reason, they attempt to find peaceful solutions to any disputes arising among them, particularly when the disputes involve a party that looks towards the lands and riches of others.

Hence, no matter the reasons or motives, wars remain an exceptional case for humans, just like surgical operations. Disputes should be resolved by dialogue and resorting to justice.

But with wars and armed conflicts becoming widespread around the world, many countries might not be spared.

When a catastrophe occurs, it occurs without warning, and may affect each and every person and their daily lives. Besides the casualties and the destruction they leave behind, wars lead to shortage of basic goods and services.

For this reason, all countries resort to emergency measures to help provide their people with their basic necessities so that life continues as normally as possible. However, your chances of survival might be badly affected if you are not acquainted with such measures.

**War emergencies**

... To tell you the truth, there is no need to pass through unnecessary hardships, because emergency measures for facing wars are quite easy to understand and follow. If you get acquainted with them as from today, you will surely be prepared for the worst. All you have to do is take part in these measures and get acquainted with them whenever the National Emergency Crisis and Disaster Management Authority organises emergency drills in your area.
**Water distribution**

- In case of failure in water installations, water distribution points will be established next to your place of residence.
- Bring containers to the nearest water distribution point and store water in an organised manner.

**Food rationing**

**Step 1/ Notification of registration**
- With respect to government services: Upon registration, you will receive a notification of registration.

**Step 2/ Ration cards notification**
- Enclose with the notification your family documents (birth certificates) and submit them at the designated registration centre.

**Step 3/ Registration centre**
- Indicate in the registration form the names and civil register numbers of all your family members on each card.

**Step 4**
- Use the ration cards to buy rationed food at authorised retail outlets.
Gas rationing

**Step 1/ Notification of registration**
- With respect to government services: Upon registration, you will receive a notification card.

**Step 2/ Application centre**
- Submit this card along with your civil register to the designated application centre.

**Step 3/ Gas cards**
- Receive your gas cards.

**Step 4/ Using gas cards**
- Use the gas cards for your gas needs.
Blood donation

When you hear an appeal for blood donation:
• Head to the nearest blood donation centre and register.

What you must bring:
• Bring along your ID, medical card and registration card… From there on, the doctor or nurse will take care of you.
Public Warning System

The public warning system is a network of sirens placed by the National Emergency Crisis and Disaster Management Authority or the Civil Defence in strategic areas all over the country. This system aims to warn people of any imminent threats that might endanger their lives or properties. The public warning system will be used to warn of air raids, land or sea attacks as well as natural or human disasters. The below table shows the meanings of the different signals that should be preferably memorised.

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<th>Situation</th>
<th>Meaning</th>
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<tr>
<td>“Warning”</td>
<td>Sent in case of danger at national level, announced by the competent authorities</td>
<td>Move to the shelter immediately or to the previously selected area</td>
</tr>
<tr>
<td>“Out of danger”</td>
<td>Sent when the threat abates</td>
<td>Could go home</td>
</tr>
<tr>
<td>“Important announcement”</td>
<td>Sent to inform people to listen to the media for an important announcement</td>
<td>Listen to any local radio immediately or any other means available</td>
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P.S.: When need be, you can call the competent authorities (Emergency or Civil Defence) on 999.
Providing, setting up and protecting shelters

Shelters set up by the Civil Defence and other competent authorities take the form of houses or public shelters. Their aim is to protect people from injuries caused by weapons during a state of emergency in times of war.

There are four types of shelters:
• Home shelter, i.e. the shelter within a single residential unit.
• Floor shelter, which is similar to the home shelter, but is bigger in size and located in a common area on each floor of the building.
• Floor staircase shelter, where the inner fire escape staircase is transformed into a shelter.
• Public shelter, which is built in a public complex (such as the metro station, a residential complex, a school, a mosque, a community centre, a government building or an underground public parking).

In a state of emergency in times of war, NCEMA will inform people of the protective measures to be taken.

Use the shelter/ home
• In case you are at home in a state of emergency… stay put, remain calm and use the home or floor shelter if available.
• For residential units with no home/ floor shelters … follow the instructions issued by the competent authorities in due time, to develop covers at home using the available materials or furniture. Such covers can provide some protection against rubble and shattered glass.

Head to the nearest public shelter
• In case you are outside your house when the public “warning” signal is heard… hide in the nearest public shelter, in the vestibule of a building or in a covered passageway (pedestrian tunnels).
Setting up home shelters

In a state of emergency, NCEMA will notify the people of the need to be prepared to set up shelters in their homes. These measures include:
- Temporarily removing all the installations and shelves in the house.
- Closing air vents.
- Providing the shelter with a phone line, a television or radio, a torch that works on batteries, etc.

Close all gas and water sources as well as all vents from which dust can leak.

Bring basic necessities such as water and medicines (if need be) to the shelter.

Head quickly and calmly to the shelter.

Stay away from walls and doors in the shelter and do not lean against them.

Listen to the radio or television to follow any important announcements from authorities.

When you hear the “end of emergency” signal, you can leave the shelter and return to your normal daily life.
Dealing with air vents

Besides the lighting, electricity, telephone, television and radio openings, there are two air vents in the wall of the shelter.

In a state of emergency in times of war:

• Seal the air vents with steel boards to ensure that the air is confined inside the shelter to protect you and your family from inhaling any pollutants from outside.
• When the air is confined, you can remain relatively comfortable inside the house shelter for several hours. The actual survival duration depends on many factors such as the age, gender and physical condition of the persons in the shelter.
• Vents can be sealed by fastening the steel boards using the usual home tools. If in the future, in a state of war emergency, you need to stay for a longer time in your home shelter or if the shelter has to accommodate more people, these vents will provide a way for introducing fresh air and removing polluted air by installing the suitable equipment to be specified by the Civil Defence, when need be.

In times of peace:

The air vents provide air for the daily use of the home shelter.

Leave at least 25% of the total air vent uncovered, to prevent anyone that accidentally gets stuck in the shelter from suffocating. This condition is set in the “authorised and unauthorised works” list found on the inside of the home shelter door.
Setting up public shelters

In case you are outside your home when you hear the “warning” signal, search for the nearest shelter. In case there are no public shelters nearby, head to an underground shelter (such as the vestibule of a building, a tunnel or a pedestrian tunnel), and stay away from windows or glass panels. If you do not find any such shelter nearby and/or you cannot reach it within minutes, search for an underground rainwater drainage or electric cable hole or any covered place, or lie down in a trench.

To identify public shelters, pay attention to the signs indicating their locations. Information on public shelter locations is available on the website.

- Move promptly without pushing others, and follow the instructions given by the persons in charge.
- Move with your family to avoid any worrying, and help persons with special needs, children and elderly people.
- If you are driving a car, stop on the side of the road, lock your car and head to the nearest shelter.
- If you are not close to a shelter, take cover wherever you are (such as in a pedestrian tunnel).
- Do not bring along bulky or flammable objects to the shelter.
Heading to public shelters

- Enter the shelter directly and do not block entrances or passageways.
- Stay with others and do not roam around.
- Remain calm and listen to the instructions issued by Civil Defence officers or to the radio or the television.
- Do not light any cooking fire.
- If you face any problems, inform the persons in charge.

Leaving public shelters

- Leave the shelter only when ordered to do so by the competent authorities.
- Move with your entire family, be patient and do not push others or run.
Taking shelter in open spaces

How do you act if you happen to be outside your house when the “warning” signal is heard?

If you happen to be outside your house and you hear the “warning” signal, run to the nearest public shelter or hideaway such as the vestibule of a building, a tunnel or a pedestrian tunnel. In case none of these facilities are found nearby, or if you are unable to reach them within minutes, search for and try to reach the following places: trenches, water drainage canals or open sewers.
Preventing damage

Although we cannot control the use of weapons such as bombs and projectiles that cause damage, there are several precautionary measures that can be taken to prevent, or at least minimise, their effects.

Protecting glass roofs

- Support all glass roofs using adhesive tape, to prevent their shattering. Windows can be left open.
- Remove anything hanging on the walls or placed on shelves, windows or balconies.
Defensive Precautions

Blackout measures

Although blackouts do not prevent enemy air raids or bombings, they can diminish their chances of success by affecting their capacity of determining and identifying targets. In such cases, follow the below instructions:

• Turn off all external lights.

• Cover all passages of internal lights, such as windows and doors using curtains and other means.

• Dim your car lights to a minimum by covering them with black tape and leaving only a small part uncovered.
3 – Protection Against Acts of Sabotage

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Terrorism…. and acts of sabotage

Terrorism is an aspect of violence committed by humans within the community. Its meaning is related to “terror and terrorising” and is defined by some as “any hostile act using violence and force against civilians, with the aim of demoralising the ‘enemy’, by terrifying civilians using all sorts of violent means.”

The term “terrorist” indicates all those who carry out operations aiming at instilling fear and terror in peaceful people.

If we look at terrorism as an image of violence witnessed by the international community since long, and developing with the progress of the community and different social relations… we notice that terrorist attacks, regardless of their atrocity, have never been as dangerous as they are today. Indeed, they are gaining momentum and claiming innumerable lives, particularly with the appearance of new forms of terrorism using scientific and technological innovations.

Consequently, “terrorism” has become one of the most popular terms worldwide, in a time where crime rates are soaring and crimes are taking increasingly diversified forms. Hence, terrorism has become a perturbing and disturbing reality for many communities, nations and countries.

Acts of terrorism are characterised by the terror they instil along with the violence they cause, such as explosions, destruction of public facilities, wreckage of railways and bridges, poisoning of potable water, propagation of infectious diseases and mass murders.

Terrorism knows no boundaries; no country is immune to its risks. And based on the 9/11 terrorist attacks, we can easily conclude how well organised and resourceful terrorists can be in our times.
There is growing concern about the potential use of chemical, biological, radiological or explosive materials by terrorists against innocent civilians. Thus, it is necessary to understand the nature of the threats and to become acquainted with the protective measures that can be taken to anticipate the risks of terrorism.

**Threats of chemical attacks**

A chemical agent is a toxic material, a hazardous gas, a liquid or a solid that can poison people and the environment. These materials can be disseminated by developed explosive means, by dispersion or by any other means used by terrorists.

Attacking by a chemical agent means the intentional release of a chemical agent with the aim of killing people, seriously harming them or hampering their movement. Most chemical agents are toxic upon inhalation, and might lead to injury if they come into contact with the eyes or skin. Terrorists can use many such chemical agents in their attacks, such as Sarin Gas, Sulphur Mustard, Hydrogen Cyanide and Phosgene. These materials target the nervous system, the skin and the respiratory system and have each their specific symptoms:

**Sarin**

Sarin is a colourless liquid or vapour, where injury is proportional to exposure. Long exposure to Sarin might lead to death, as witnessed in the attack carried out by “Aum Shinrikyo” group on the Tokyo subway in 1995 clearly shows.

**Characteristics and symptoms of Sarin exposure:**

The symptoms of Sarin exposure include: blurred vision, heavy breathing, convulsion, sweating, vomiting, diarrhoea, unconsciousness, cramps and respiratory arrest leading to death. Its characteristics:
• Easily absorbed by the respiratory tract, skin and eyes.
• Paralyses the neurons in the nervous system, leading to watery eyes, salivation, urination, gasping, vomiting, muscle twitching, epileptic seizures, respiratory arrest and death.
• High exposure to nerve agents might be lethal within a short time (a few minutes only).

Sulphur Mustards

These include Mustard Gas, a chemical warfare agent that poisons the cells and is capable of causing big blisters on the exposed skin. Contrary to its name, this agent is not a gas but rather a liquid that turns into vapour.

Pure Sulphur Mustards are colourless and odourless and are viscous oily liquids at room temperature. But when used in an impure form, as a chemical warfare weapon, their colour is yellow/brown and they smell like mustard, garlic or turnip, hence their name. Sulphur Mustards harm the respiratory system when inhaled and cause vomiting and diarrhoea when swallowed, harming the eyes, mucous membranes, lungs, skin and organs producing blood. Their most dangerous effects are long-term since Mustard Gas causes cancer and genetic mutations for which no treatment has been discovered until now.

Characteristics and symptoms of Sulphur Mustard exposure:

• Mainly absorbed by the body through the skin.
• Causes skin rash, acute pain, blisters upon contact and severe allergy in the respiratory tract.
• Can be used to cause serious injuries and not to kill, but can be lethal if used in high dosage.
Hydrogen Cyanide

Commonly known as Prussic Acid throughout history, Hydrogen Cyanide is a chemical compound that takes the form of a highly toxic colourless liquid with a boiling point a bit above room temperature. Hydrocyanic acid can be either in gas or liquid form with a distinctive smell and very weak acidity. It burns in the air in a blue flame and melts in water and in alkaline solutions. A cyanide ion that enters the body by inhalation or through the digestive tract leads to cases of acute, or chronic, poisoning which might be lethal. If cyanide enters the blood circulation, haemoglobin turns into cyanhemoglobin, an ineffective form of transportation of oxygen taken in through the respiratory tract to the tissues. cyanide poisoning can be acute or chronic and cause- as the case may be- general weakness, headaches, migraines, dizziness, nausea, vomiting, blurred vision, low blood pressure, convulsions and coma, which might lead to death.

Characteristics and symptoms of Cyanide exposure:

- Affects the respiratory system and blood circulation, by preventing the blood from distributing oxygen to body tissues.
- Can be absorbed by inhalation or through the skin.
- Death might occur, within minutes, due to the lack of oxygen in case of exposure to high dosage of the agent.
Phosgene

It is a colourless, heavy, smelly and highly toxic gas that reacts with iron to turn into a reddish yellow toxic material. It severely damages the respiratory system, leading to suffocation. The Germans used it against the Allied Forces in 1915 during WWI.

Characteristics and symptoms of Phosgene exposure:

• Affects unprotected people, and leads to the irritation of the respiratory tract.
• In severe cases, the respiratory membranes swell up and the lungs fill with liquid to the point of emptying them from air.
• Exposure to suffocation agents leads to a dry throat, coughing, breathlessness, nausea and watery eyes.

Possible signs of a chemical attack

With the increasing tensions, the widespread disputes and the propagation of violence, wars and terrorism worldwide, few countries are now safe from their weapons, effects and tragedies. One of such threats is chemical warfare.

What are the signs of a chemical attack?

• Appearance of many pathological cases as well as symptoms and signs such as watery eyes, breathlessness, headaches and vomiting.
• Death of three people or more for no obvious reason.
• Discovery of a number of injured or dead birds, fish or small animals in the contaminated area.
How to act in case of a chemical agent attack?

If you are inside a building:
• Avoid the contaminated area and get out of there fast.
• Cover your mouth and nose with a piece of cloth that allows you to breathe (such as a wet towel).

If you are outside:
• Cover your mouth and nose with a handkerchief or a piece of cloth.
• Do not move in the direction of the wind that might be carrying hazardous chemical materials.
• Find a shelter or get into any building as fast as you can and try to get protection there.

If you are in your car:
• Get out of your car at once, and go home or get into any nearby building.
• If you cannot do so, close the doors and air vents of your car and, if possible, close the air conditioner vents using a tape and drive away from the contaminated area.
• Cover your mouth and nose with a piece of cloth.
• Listen to the radio to follow the latest developments and instructions issued by the authorities.
Exposure to a chemical agent

If you have watery eyes or irritated skin, or have trouble breathing, you may have been exposed to a chemical agent. In this case, you should do the following:

- Take off your clothes at once and put them in a bag to throw them away.
- Find a water source and wash yourself with plenty of water using soap if possible.
- Try to get medical attention as soon as possible.

If you suspect that someone has been exposed to a chemical agent:

- Keep your distance from the contaminated person and seek help.
- Do not try to give them first aid, unless it is safe to do so, because you might get contaminated yourself.
Threats of biological attacks

Biological warfare is the intentional use of germs, viruses or other organisms and their toxins that lead to epidemics among humans, animals and plants with the aim of killing or handicapping them. This type of war is also known as “bacterial” or “germ” war, and has general characteristics, the most important of which being:
- High epidemic tendency.
- Ability to resist natural conditions, such as temperature and drought.
- Adaptability and speed of propagation.
- Ability to cause great loss in a short time.
- Lack of immunity in the target.
- Suitability for field use.
- Ease of production and storage.

There are three main ways of disseminating infection using biological agents: Through the skin or wounds, through the digestive tract by means of contaminated food and drinks or through the air. The last method is considered the most efficient of all with the possibility of using airplanes, ships, bombs, cannons and rockets to disseminate these agents.

Contaminants, such as mosquitoes and rats, can also be used to transmit them. While some agents, such as smallpox, are contagious, others, like anthrax, are not.

Protection against biological warfare constitutes a true dilemma. Vaccination is the most important solution in this case. Another defensive measure consists of wearing protective gear and masks as well as storing food and water, increasing hygiene level, quarantining contaminated areas as well as decontaminating infected people, equipment and areas.
Categories and effects of biological agents

**Bacterial agents:**
**Bacillus Anthracis**
Bacteria are small unicellular organisms. Under special conditions, some types of bacteria, such as Bacillus Anthracis, the agent that causes Anthrax, can change into plaques resistant to extreme conditions, such as cold, heat, drought, chemicals and radiation.

Bacteria that cause diseases in humans can act in one of two ways:
- By entering the tissues of the human body.
- By producing toxins and toxic materials.

**Viral agents:** Sars, chickenpox
Viruses are microscopic organisms consisting of a protein coat containing a genetic material. They do not have their own metabolism and hence need living carriers, such as the cells of an infected human body, to reproduce. Viruses are capable of resisting antibiotics.

**Biological toxins:** Ricin
They are toxins produced by organisms. Ricin is extracted from castor oil plant seeds.

**Other types of biological agents**
Other biological agents do not fall within the general categories of the abovementioned agents, such as the causative agent of Q-Fever, which has common characteristics with bacteria and viruses but cannot nonetheless be classified as a virus or as a bacterium.
Possible signs of a biological attack
A biological agent attack may not be evident on the spot, due to the absence of an incubation period, whereas the pathological effects of the agent are not visible.

So what are the signs of a biological agent attack?
- Presence of an unfamiliar powder or gelatinous material, along with a suspicious-looking spraying device.
- Reports raised by local healthcare authorities on uncommon pathological cases within the community.
- Wave of patients in need of emergency healthcare.
What to do in case of a biological agent attack?

Victims of biological attack may not exhibit apparent symptoms, but, if you suspect that you, or someone else, have been exposed to such an attack, the following precautions should be taken:

• Quickly identify the area where you suspect that a biological agent is present and get away from it.
• Cover your nose and mouth with layers of cloth to filter the air while allowing you to breathe.
• Call 999.
• State your address and details in case there is a need to reach you immediately.
• Shower thoroughly with soap and water at the earliest chance and change into a clean set of clothes.
• In case you or any family member notice any pathological symptoms or develop a fever, try to contact a physician designated by authorities.

• If you think that someone has been exposed to a biological attack, take precautionary measures and contact the authorities for assistance.

• It is imperative to protect your respiratory system if you have to come near a person suspected to have been exposed to a biological agent.

• Maintain a safe distance from a contaminated person and avoid direct contact.

• Request medical assistance and observe the health authorities directives.
Anthrax

Anthrax is an acute disease caused by the bacterium Bacillus anthracis. Most forms of the disease are lethal, and it affects both humans and animals. There are effective vaccines against anthrax, and some forms of the disease respond well to antibiotic treatment.

Like many other members of the genus Bacillus, Bacillus anthracis can form dormant endospores (often referred to as "spores" for short) that are able to survive in harsh conditions for decades or even centuries. Such spores can be found on all continents, even Antarctica. When spores are inhaled, ingested, or come into contact with a skin lesion on a host, they may become reactivated and multiply rapidly.

Anthrax commonly infects wild and domesticated herbivorous mammals that ingest or inhale the spores while grazing. Ingestion is thought to be the most common route by which herbivores contract anthrax. Carnivores living in the same environment may become infected by consuming infected animals. Diseased animals can spread anthrax to humans, either by direct contact (e.g., inoculation of infected blood to broken skin) or by consumption of a diseased animal's flesh. Anthrax spores can be produced in vitro and used as a biological weapon. Anthrax does not spread directly from one infected animal or person to another; it is spread by spores. These spores can be transported by clothing or shoes. The body of an animal that had active anthrax at the time of death can also be a source of anthrax spores.

Anthrax in powder form isn't contagious, but it is still considered a threat to public safety. In the UAE, the competent authorities and the Ministry of Health have taken preventive and precautionary measures to deal with anthrax threats.

The public must remain calm and exercise caution in order to facilitate the process of identifying any potential signs of an anthrax attack.
Instructions on dealing with material suspected to contain anthrax

The following are instructions on how to deal with materials suspected to contain anthrax (such as a suspicious powdery substance):

• Do not come into direct contact with the substance. If the container is already open, immediately cover any spilled or uncovered substances with a piece of cloth, a plastic cover, paper or a box. Do not remove the lid.

• Do not inhale the substance or attempt to clean any spilled substance.

• Shut down any fans or localised air-conditioning units in the contaminated area or room.

• Leave the room and shut the door. Prevent others from entering the affected area.

• Head to the nearest washroom and wash your hands and any part of your skin that was exposed to the suspicious substance with soap and water.

• Remove all your clothes and shower with soap and water. Do not use detergents or disinfectants on your skin. Discard of your clothes in a plastic bag or wash them with detergent.

• Prepare a list of the names and contact numbers of all the people that were present in the area where the suspected substance was present and submit the list to the police for investigation purposes.

Cordon off the area and place a cover over the suspected substance.

Thoroughly clean body parts that were exposed to the substance.
Decontamination procedures for contaminated individuals

In case of an incident involving hazardous materials such as chemical, biological or radioactive substances, the relevant authority sets up special installations on site to decontaminate any potentially contaminated people. This process is crucial for saving lives and preventing the spread of contamination. The integrated decontamination process includes the following six steps... Nonetheless, it is important to remember that discarding of the victim's clothes can help get rid of up to 80 per cent of the contaminating substance.

**Step 1/ Gather your personal belongings**
- Place your personal belongings in a small bag.
- Write your national register number on the bag with a marker.
- Place any small or important items in the personal effects bag and hand the bag to Civil Defence or the relevant authority.
- Place any garbage in a separate bag and close it tight then proceed to the showering unit.

**Step 2/ Remove your clothes**
- Remove your clothes and the remaining personal effects and place them in a trash bag.
- Close the bag and seal it tight with a piece of threat or rope.
- Discard of the trash bag by placing it in the trash container.

**Step 3/ Shower**
- Use a sponge.
- Lean forward and wash your hair first.
- Soak yourself in water and use the non-ionising shower liquid that is provided to you.
- Use the sponge to rub all your body with the shower liquid with special focus on your armpits and groin.
- Dispose of the contaminated sponge in the trash bin.
- Shower completely for two minutes to wash off the contaminated liquid.
Step 4/ Dry off
• Use a towel to dry off completely.
• Discard of the contaminated towel in the trash bin.

Step 5/ Examination
• Lift your arms in a T to allow paramedics to test for contamination.
• If the individual fails examination, he/she must repeat step 3 (showering).

Step 6/ Put on clothes
• Put on a bathrobe and a pair of shoes.
• Proceed to the temporary quarantine area and await further instructions.
On-site protection

Get inside your house and remain there while you follow up on news.

Chemical, biological or radioactive pollutants can be accidentally or intentionally released into the environment. In such an occurrence, you may be asked to observe safety procedures on site. This means you must remain in your home and take the necessary precautionary measures to ensure your protection and the protection of your family.

On-site safety is a simple measure that consists of the following:

• Shutting windows, doors and any other openings.
• Trying to limit the leakage of damaging substances into the house or office.
Essential supplies

The following items are used for on-site safety measures and are placed in a large room with sliding windows or doors. They are divided into two categories:

Essential supplies

• One roll of tape (minimum 48 mm width).
• Sufficient black trash bags (to be cut up and used to cover windows, air conditioners and vents in the room).
• A pair of scissors.
• Battery operated radio and spare batteries.

Optional items

• Flashlight and spare batteries.
• Bottled water.
• Non-perishable food items (a minimum of one meal).
• Mobile telephone (in case no landline telephone is available in the safe room).

It is always advisable to use any materials that are easily found around your house to implement the on-site safety measures.
How to follow up on on-site protection?

The relevant authorities issue instructions to the public to resort to on-site protection measures through all or one of the following methods:
1. Sounding the “Important Message” siren through the public warning system, followed by instructions via telecommunication media (TV, radio, text messages, social media).
2. Direct door-to-door notifications.

How to safely protect your house?

1. When on-site instructions are issued, remain calm and gather all your family members inside your home.
2. Close all doors, windows and openings.
3. Shut down all air-conditioning units that draw air from the outside.
4. Go into the room with the least number of vents. It is preferable that the room contains a toilet and a water source.
5. If duct tape is available, use it to cover any visible holes around windows, doors and air-conditioning vents. Use wet towels to cover the bottom of doors.
6. If time allows, you can use trash bags or plastic covers to cover any holes or cracks, increasing your level of protection.
7. Follow the news for more information or instructions from official sources.
8. Do not leave the room unless you are instructed by official authorities to do so. At this point only, you can remove any covers and open windows to allow air into your house.
On-site protection at the workplace or at school

On-site protection measures at the workplace or at school are mostly the same as those prescribed for in house protection measures. However, due to the complex structure of some buildings and the large number of people present in some, previous plans are devised to predetermine the room/rooms that will be used for on-site protection and to determine the roles and responsibilities of the persons involved in order to ensure coordination and smooth procedures. (A sample on-site protection instructions for buildings is available on the NCEMA website at www.ncema.gov.ae).

**Essential steps:**
1. Close all windows and doors and shut down equipment and lights to reduce heat generation.
2. Shut down all air-conditioning equipment that draws air from the outside.
3. Proceed to the predetermined protection room/rooms.
4. Direct non-tenants or residents to the protection room/rooms.
5. Seal any visible openings with duct tape and plastic covers.
6. Listen closely to the radio or TV for further information and instructions.
7. When on-site protection is over, open windows and doors and put air-conditioning back on.
In-car protection

If you are close to your domicile, office or to any public building, head directly to it in your car. Get inside the building and follow on-site safety instructions. If that isn’t possible, observe the following steps:
1. Close windows and vents if possible. Seal air-conditioning vents with tape. Move the car away from the contaminated area.
2. Cover your mouth and nose with a piece of cloth.
3. Listen to the radio for any new developments and instructions.

On the street

Head to the nearest building or look for a transportation vehicle to get away from the contaminated area. In case this isn’t possible:
1. Do not walk downwind.
2. Cover your mouth and nose with a piece of cloth.

N.B. Remember that on-site protection instructions are usually issued for several hours, not days. It is possible that the room used for protection runs low on oxygen. If you are exposed to a hazardous substance, report to the relevant authorities for immediate medical care.
Bomb attacks and booby-trapped parcels

Bomb attacks are increasingly occurring in various places around the world and no one country is completely safe. Bomb attacks can cause major fatalities as well as serious damage to property and infrastructure. Caution and strict observance of safety measures and instructions can help in reducing fatalities and damages.
In case you suspect an object or you find an unexploded bomb

- Move away from the location and do not touch or move the suspicious object.
- Warn others in your area.
- Immediately call police.
- Describe the suspicious object: shape, size, colour, location.

Evacuation of a building in case a bomb or a suspicious object:
1. Leave the building calmly and in an orderly manner.
2. Avoid using elevators.
3. Follow the instructions of the guards or the floor officer.
4. Take your suitcase with you and do not leave any personal effects unattended.
5. Move to the gathering point (at least 500 metres from the building) for the headcount.
6. Upon leaving the building, be aware of emergency vehicles that arrive at the scene.
If you receive a bomb threat call...

Do not panic... remain calm.
Allow the caller to speak for as long as possible while the police track the call.

• It is essential to observe the following:
  1. The caller’s voice (tone, male or female, child or adult).
  2. The language and the accent (local or foreign).
  3. Speaking manner (quick, intense, emotional, angry).
  4. Background noises or sounds (traffic, music, announcements, screaming).
  5. The person to whom you are required to transfer the message.

• Do not try to mock or antagonise the caller in any way.
• Be polite and remain calm.
• Do not spread rumours.
• Ask another person to call the police if you haven’t done so yourself.

• An officer who receives such a call will deal with it seriously and will immediately try to determine the following:
  1. The exact location and the shape of the bomb.
  2. Detonation time and who will execute it.
  3. The amount and type of the explosive material.
  4. The possible causes of such behaviour.
If you receive a booby-trapped parcel or letter

Most booby-trapped parcels/letters that are delivered through the mail allow for a reasonable processing time. In case you receive a suspicious letter/parcel, do not attempt to open it since most explosives are designed to detonate when the outer cover or lid is removed or torn up.

• In case you are not sure of the source of the letter/parcel and you have reason to suspect that it contains a bomb, treat it as a bomb and notify the police.
• Place the letter/parcel in a corner and away from windows.

• Evacuate the room and, if necessary, evacuate the building and leave windows and doors open. This allows for the explosion to spread out and reduce risks of projectile glass shrapnel.
• Instruct building, security personnel and the evacuated individuals not to touch any suspicious objects.

• In case an explosion goes off and the evacuation process is affected, issue instructions to redirect people to alternative and safer exits.
• Listen to the radio or watch television for further instructions from official sources.
In case you are injured during an explosion…

- Slowly move away from the affected area if you are able to evacuate.
- Give a sign to emergency responders to allow them to locate you if you are unable to evacuate.
- Move only if necessary to avoid exacerbating your injury. Specialised medical personnel will provide you with care and remove you from the location.

In case you are trapped inside a building…

- Stay where you are and protect your head and face from glass shrapnel or falling objects.
- Stay away from any objects that are not firmly fixed.
- Lean only on walls that have no glass windows or hanging shelves.
- When possible, crouch under a solid and sturdy table.
In case you are trapped under rubble…

- Use a flashlight if possible to signal your position to rescue workers.
- Avoid any unnecessary movement.
- Move your fingers and toes from time to time to ensure the circulation of blood and to prevent thrombosis.
- Cover your mouth and nose with a piece of cloth to avoid dust inhalation.
- Bang on a pipe or a wall to help rescuers pinpoint your location.
- Whistle to alert rescuers to your location.
- Yell, but only as a last resort. Yelling could deplete your energy and cause you to inhale a dangerous amount of dust and fumes.

In case you are away from the explosion…

- Do not get near the affected area.
- Remain calm.
- Do not call 999 unless you have a real emergency.
- Listen to the radio and watch television for the latest developments and instructions.
In case of evacuation due to an explosion…

Remember to fully observe instructions and directives.

**What you should do:**
- Remain calm. Do not panic.
- In case a fire alarm is sounded in your building, you must proceed to normal evacuation.
- Observe instructions and directives issued by the building management.
- Take only what you need (medicines and personal identification documents). Do not take too many personal effects in your luggage.
- Walk fast, do not run. Help children, elderly people and people with special needs.
- Evacuate streets for emergency vehicles.
- Do a headcount of all the people at the gathering point.
- Call a relative or a friend as soon as possible to reassure them that you are safe.

**What you should not do**
- Do not use elevators; you may get stuck.
- Do not randomly open fire exits.
- Do not use random cordless or mobile telephones.
- Do not operate any electrical appliances.
- Do not spread rumours.
- Do not attempt to return into the building.
After the explosion

Beware of the following hazards:
• Damaged building, collapsed walls, leaning posts and surfaces.
• Holes in the ground and sharp-edged rubble.
• Scattered glass and glass shrapnel.
• Fires due to overheating.
• Toxic fumes.
• Water and gas leaks due to broken utility lines.
• Uncovered power lines.
• Secondary explosives.

Offering assistance:
• In case you are trained in first-aid, try to keep any severely injured people calm until response teams arrive on the ground.
• In case you are not trained, leave the danger zone. Recognise the location of any injured people and notify the emergency response personnel.
• Do not go into a structurally damaged building to attend to or rescue victims.
• Ensure your own safety before helping others.
Dirty bomb threats

Conventional explosives such as TNT are used in dirty bombs combined with a readily available radioactive material such as Cesium 137. Once detonated, it contaminates the area around the explosion with radioactive material.

Radiation is present in every aspect of our lives. It occurs naturally in the ground or it can reach us from space. It can also be found in natural form in drinking water, in the soil or in construction material.

On the other hand, radiation can also be generated by man, such as X-Rays, and in atomic power plants or through smoke detectors.
Types of radiation

Radiation is mainly classified in two types:

1. Ionising radiation (e.g. x-rays, gamma rays), cosmic rays, Alpha particles and Beta particles.
2. Non-ionising radiation such as electromagnetic rays, radio waves, radar waves, microwaves, infrared waves, ultraviolet rays and visible light.

The three main types of ionising radiation that are released from a dirty bomb are:

**Alpha Ray**

Alpha rays can be intercepted with a piece of paper or by a human body. But they can be seriously harmful in case their fumes, which contain Alpha particles, are inhaled or absorbed through open wounds.

**Beta Ray**

Beta rays cannot be intercepted with paper, but their propagation can be stopped with a piece of wood or aluminium. They can cause serious damage if they penetrate the body through the skin.

Beta rays are significantly more penetrating than Alpha rays. Some Beta ray particles can penetrate and damage skin. They are seriously harmful if fumes or substances that release Beta rays are inhaled. Skin may be damaged if it comes in contact with high concentrations of Beta pollutants for an extended period of time.
**Gamma Ray**

It is a long-range electromagnetic radiation that can be potentially damaging to body cells. Gamma rays are the most dangerous of radiations and they are deeply penetrating. It can travel for a long distance in the air and penetrate several inches deep inside human tissue. It is the result of nuclear reactions that often occur in space or in radioactive elements such as uranium.

Radiation is released into the void and the air at the speed of light. It is more powerful and more penetrating than ultra-violet and X-rays and its wavelength is significantly short. If it weren’t for the Earth’s atmosphere, which absorbs and deflects such radiation, life on the surface of our planet would have gone extinct.

Gamma radiation can be stopped with concrete and heavily dense materials such as lead. Most materials and clothes don’t provide protection for the skin. This type of radiation is used in the medical and the industrial fields but in very small quantities. It destroys cancer cells.
Symptoms of exposure to radiation

The following are symptoms of exposure to Gamma rays:
• Damage to body cells.
• The body is capable of replacing a small amount of damaged cells without there being any visible symptoms.
• In case a large amount of cells were damaged, our body organs stop functioning properly and the victim will exhibit symptoms of radiation that include nausea, vomiting, skin swelling and burns.
• Sometimes, cells survive but are badly damaged when exposed to radiation. This can lead to an accelerated reproduction of abnormal cells, which is known as a cancerous growth.
• Signs and symptoms of abnormal cell growth may remain invisible for several years.
• Injuries include burns and shrapnel cuts.
• A dirty bomb explosion sounds and looks like a conventional bomb explosion.
• Victims may suffer from explosion-related injuries such as burns and cuts.
• Specialised equipment is required to test for radioactive substances in a dirty bomb explosion. Otherwise, it is nearly impossible to distinguish a dirty bomb explosion from a conventional bomb explosion.

In case you are outside your home and an explosion or radiation occurs near you:
• Cover your mouth and nose.
• Move away from the immediate area and to a 100-metre distance upwind and to an elevated area.
• Change direction if you are moving downwind.
Stay home if your building is stable...

**If an explosion or radiation occurs near your building:**
- Check if your building is damaged.
- If the building is stable, stay where you are and close all doors and windows and shut down all air-conditioning systems.
- Otherwise, damaged buildings must be evacuated.
- Cover your mouth and nose and get away to a 100-metre distance from the direction of the wind and to an elevated and safe area.

**Stay at home if the building is stable**
If there was an explosion, or release of radiation near your building:
- Check if the building was affected.
- If the building is stable, stay where you are. Close all windows and doors, turn off the air conditioner and/or other ventilation systems.
- Otherwise, you must vacate the building.
- Cover your nose and mouth and walk away at least 100 metres, from the direction of the wind, and to an elevated area of the danger zone.

**Building evacuation**
In case of a radioactive explosion or leakage inside your building:
- Cover your mouth and nose.
- Leave the building immediately.
- If you weren’t exposed to radiation, move a 100 metres away upwind and to a safe and elevated area.
- If you were exposed to radiation, wait until you are decontaminated by emergency personnel.
Reducing exposure to radiation

In order to minimise exposure to radiation, think about taking shelter, distance and time:

**Taking shelter:** Look for a shelter in other buildings that can protect you from radiation. **Distance:** The farther you get away from the explosion and the radiation, the less prone you are to exposure. **Time:** Minimise the time spent in the radioactive area.

**If you think you were exposed to radiation…**

1. If utilities are available, remove your clothes, place them in a bag and seal it. Keeping contaminated clothes will allow for radiation testing.
2. Take a shower to get rid of any dust laden with radioactive substances.
3. Seek immediate medical care.

N.B. Listen to local radio or watch local television channels for instructions from official sources regarding radiation leakage. You will be informed of specialised centres where you could report radiation or get tested for radiation as well as any safety measures.
Public transportation safety

Security personnel are deployed in public transportation spaces, on airplanes, buses and metros. Security officers can be easily spotted by their special badges.

Public transport security officers help in the following situations:
• Ensuring security and careful monitoring of any terrorist threats.
• Circulating patrols at metro and bus stations.
• Conducting random inspection of luggage and packages for suspicious material.
• Please cooperate with public transport security officers to ensure people's safety.

In case you notice a suspicious individual or object...

• Call 999 or notify the relevant security personnel.
• Call 999 or station personnel in case of an injury or a life-threatening situation.
• Do not put yourself or others in harm’s way.
• Remain calm and think before you take any action.

P.S. Do not leave your personal belongings unattended.
Evacuation of buses and trains

- Follow instructions issued by official sources.
- In case of a problem on the train or the bus, do not panic.
- Listen carefully to announcements and follow the instructions of personnel.
- Care for young and elderly passengers.
- Do not try to force the door open or to jump off the train or the bus.

- Follow the instructions at emergency exits on both ends of the train to safely open the doors and exit the vehicle.
- During evacuation, electric power will be shut down in passageways to ensure safety. Emergency air-conditioning and lighting will be provided on trains and inside tunnels.

- Alert the train/bus attendant in case you notice a suspicious material.
- Do not panic if you notice any suspicious material in the vehicle.
- Notify the train/bus attendant. He/she will assess the situation and direct passengers to another train/bus if need be.
4 – First Aid

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What is first-aid?

First-aid refers to the provision of initial care for an illness or injury. It is usually performed by non-expert, but trained personnel, using a series of simple and in some cases, potentially life-saving techniques, until definitive medical treatment can be accessed.

A paramedic is the person performing the initial first-aid using simple skills and techniques. Paramedics don't need advanced medical training, they simply need to acquire first aid skills that can be performed with minimal equipment.

The concept of initial first-aid dates back to the eleventh century in Europe, during the Crusades when teams of knights were trained to assist the injured during battle. Offering care and assistance to war victims has been practiced in many oriental civilisations for centuries. Nursing and administering first-aid were among the main duties of women in times of war.

The key aims of first-aid can be summarised in three key points:
- Preserve life.
- Prevent further harm.
- Promote recovery.
Conflicts and wars played an essential role in developing the concept of first-aid assistance. Organisations were established with the sole role of providing initial healthcare assistance such as the Red Cross and the Red Crescent organisations.

With the ever-growing variation and proliferation of hazards, individuals sought to acquire first-aid skills and most people today keep a medicine cabinet in their homes, cars or workplace.

Catastrophes usually cause large numbers of casualties that require medical attention at specialised establishments. UAE emergency management agencies work around the clock to ensure that their first aid squads can provide emergency medical services at any time and any place across the country.

A medical emergency is an illness or an injury that may lead to serious complications or death unless they are promptly attended to. These include bleeding, loss of consciousness, heart attacks, severe burns, etc.
How to stop bleeding

Bleeding refers to the loss of blood from blood vessels anywhere in the body. It varies in degree and severity depending on the nature of the accident.

The best way to stop bleeding is to apply direct pressure on the wound. This is one of the most effective ways to stop severe bleeding. It consists of the following steps:

- Use finger or hand pressure directly on the wound. Bleeding is likely to stop in a few minutes.
- This method isn’t without minor risks and could lead to infection due to bacteria. To prevent this from happening, cover the wound with a clean piece of cloth or gauze before applying pressure.
- This method must not be used in case a foreign body is wedged in the wound or if bone fracture is suspected.

Place the palm of the hand or fingers over the bleeding area and press it directly.
How to treat burns

Burns are injuries to skin tissue caused by heat, fire, radiation or liquids (hot water or chemical liquids). Burns are painful and vary in degree and severity, and in some cases they cause blisters and swelling.

The following steps must be followed to treat burns:

• Run cool water over the area or immerse the burn in cool water for at least 10 minutes to stop it from spreading and to reduce pain and swelling.
• Remove any rings, watches, belts or anything that could further irritate the burn before it swells.

• Cover the burned spot with a clean, preferably sterilised piece of cloth or gauze.
• Cover a burned face with a gauze mask and make sure to cut out holes for breathing.
• Do not burst the blisters or remove anything that is stuck to the burned spot.
• Do not apply any lotions or creams on the burned spot.

N.B. For severe burns, call 999 for assistance.
How to treat bone fractures

A broken bone, or a bone fracture, is a term used to describe a crack or a break in a bone due to high impact or trauma to the bone. Some diseases can weaken bones and cause them to break, such as osteoporosis and tumours growing near the bone.

Symptoms and signs of broken bones include intense pain combined with limited mobility or inability to move a limb, swelling, bruising or bleeding and an out-of-place or misshapen limb or joint.

Applying First Aid for Cases of Fractures as follows:

1- Treat severe bleeding and breathing difficulty, if any.
2- Do the treatment on site.
3- Avoid unnecessary movement.
4- Fix the injured limb and place the splint on the joint, above and below the injured limb. In the absence of a splint, and the fracture was in the lower limbs, you could use the other limb to fix the fracture. If the fracture was in the upper limbs, you could use the patient’s trunk to fix the fracture.

First, treat severe bleeding and breathing difficulty, and then fix the movement of the affected limb.
How to carry injury victims without a stretcher

When a stretcher isn't available, you may need to move injury victims manually using one of the following methods:

If the victim is able to walk with some help:
- Use the “human crutch” method to move a conscious victim who is able to walk with some assistance.
- Hold the victim firmly around the waist and wrap his/her arm around your shoulders allowing him/her to lean on you.

In case the patient is of a lightweight: you could use the so called “firefighter lift”. This way is suitable for lightweight patients, whether they were conscious or unconscious. All you have to do is to follow these steps:
1. Crouch down.
2. Place one of the victim’s arms across your shoulder and lift.
3. For more stability, wrap your arms around the victim’s legs and grasp his/her other arm.

If the victim is lightweight and conscious: carry the victim on your back if he/she is able to hold on using his arms. To ensure the victim’s stability, you must hold him/her firmly by placing your arms under his/her knees while he/she crosses his/her arms over your chest.

• If the victim is lightweight: use the “crib carry” where you place your arms under the victim’s shoulders and legs.

Remark: You must first make sure to fix the patient’s neck before moving them, using the “Neck Collar” in the case there is no pending danger that requires the patient’s immediate evacuation before ensuring the fixation of the neck.
How to resuscitate heart attack victims

Heart attacks usually happen when the heart muscles are affected by a lack of blood supply. The symptoms and severity of heart attacks vary from one person to another. They occur suddenly at any time while working or resting. The patient’s case may develop to a point where breathing stops and the absence of any sense of pulse. In this case, you have to act quickly to help the patient by doing the following steps:

1- Check the patient’s condition by patting gently with both hands (palms) on his shoulders.
   • Ask for help by paging or calling (999) for an ambulance.
   • Lay the patient down with his face upwards, on a flat and firm surface, and move his head and body at the same time.
2- Open the patient’s mouth by raising his upper jaw slightly.
3- Push the patient’s lower jaw down.
   If you notice any objects in the mouth or throat remove them.
4- Keep the position of the head raised by raising the jaws. Put your face close to the patient’s mouth and watch his/her chest, look, listen and look for any signs of breathing for a period not exceeding (10) seconds.
5- If there was no sign of breathing, start applying artificial respiration from mouth to mouth.
   • Keep an open air passage, and close the patient’s nose by using two fingers and blow the air into his mouth twice by taking two deep breath as far as you can stretch your rib cage in case the patient was a child or an adult. If the patient is an infant, give him two short and quick breaths.
6- Then, sense the pulse by putting two or three fingers on the external side of the neck for a period not exceeding (10) seconds.
   • In the absence of pulse, start the respiration process from mouth to mouth at a rate of 12 times each minute until the patient starts breathing normally. After that, in case there was no pulse, start the cardiopulmonary resuscitation process immediately, abiding by the following exact steps (steps 7 to 10).
First Aid

P.S. Performing CPR and artificial respiration effectively requires training and frequent practice on resuscitation dummies.

Place the heels of your hands on the chest and avoid applying pressure on the ribs
7. If no pulse can be felt, apply chest compressions as follows:
   • Place the your lower palm on the middle of the breastbone, keeping your fingers away from the ribs. Put the lower palm of the other hand on top of this hand.
   • Keep your elbow straight and press down firmly and quickly to achieve a downwards movement of 4 to 5 cm then relax and repeat the compression. Aim for 15 compressions per 10 seconds.

Do not remove your hands from the chest in between compressions
8. Pushing the patient’s head back to open the air passage. Pinch the patient’s nose and place your mouth over the patient’s mouth and give him a couple of breaths.
9. Aim to complete nine cycles of 30 compressions/2 breaths in two minutes. Check for pulse at the end of every five cycles.

Stop compressions immediately when pulse returns and check for breathing
10. The moment pulse returns, immediately stop compressions and check for breathing. If you can’t detect breathing, continue the artificial respiration until breathing returns to normal.
Using of External Defibrillator Device for Cardiac Resuscitation:

Cardiac Arrest means total loss of the heart’s mechanical function and pulse stop. In most cases, the heart stops with the sudden collapse of the patient and the stop of breathing as well. In this case, there is an immediate need for breathing from mouth to mouth and cardiac resuscitation until the emergency medical services arrive. There should be some attempts to restore the normal pulse of the heart. Death can occur within minutes if the normal pulse was not restored. The defibrillation process remains the only treatment that helps in cardiac resuscitation and restoring normal pulse.

Remark: External Cardiac Resuscitation Equipment is available in some shopping centers and public places.
Defibrillator Device:

A «defibrillator» is a medical device used in treating serious heartbeat disorders, such as fibrillation and ventricular tachycardia as well as non-serious heartbeat disorders such as flutter and atrial fibrillation. The device helps eliminate the disorders the electrical signal transfer across the heart by directing a higher electrical current than the one generated in it due to the activity of the heart muscle cells, so that it stops all the random electrical signals. Thus, the heart electrically returns to the zero point and the beats returns to normal.

There are many types of Defibrillator Devices, according to the desired function and need. It is divided into monophasic and biphasic defibrillators. In the monophasic device, the electrical current moves in one direction from one pole to the other. In the biphasic device, the electrical current moves bi-directionally. These devices change the current direction in a short period. It is considered more effective in eliminating ventricular fibrillation. The percentage of patient recovery by using biphasic devices may increase from 28% to nearly 40%.

Operating the AED

Apply the following steps to operate the AED:

1. Open the case containing the chest electrode pads and plugs.
2. Wipe the patient's chest clean and dry and carefully remove the layer covering the pads.
3. Attach the electrode pads to the patient's chest. Place one pad on the right centre of the chest above the nipple and the other pad slightly below the other nipple and to the left of the ribcage.
4. Make sure the electrodes are firmly attached by pressing gently on the pad. Good attachment increases the chances for an effective shock.
Seven easy steps to use an AED

1. Shout in the face of the patient, or pat on his shoulders strongly to check if the patient is conscious or not.
2. Call the emergency services on 999 and get an AED device.
4. Fix the defibrillator as shown in the picture on the device, and follow its own voice instructions while continuing the breathing resuscitation procedures.
5. Click on the defibrillator to direct the shock, making sure that all those around are far from anything connected to the patient.

6. Continue CPR and check for pulse.

**Remark:** Some traditional devices depend on the operator instructions. In this case start applying an electrical shock when the device gives the complete charging signal.

7. If pulse hasn’t returned, continue CPR and use AED.
How to treat choking

Choking due to blocked airways in an adult, alert patient

Look out for signs of choking
1. Ask the patient if he/she is choking.
2. Clenched fingers are a sign of choking.
3. If the patient can talk, breathe or cough, do not interfere to stop him/her from trying to remove the foreign object obstructing his/her breathing. Otherwise, perform abdominal thrusts until the foreign object is removed.

How to apply the abdominal thrusts:
4. Stand behind the patient and wrap your arms around the patient’s waist.
5. Hold the fist of one hand with your other hand and put the side of your thumb in the middle or a little bit above the navel.
6. Press the fist of your hand on the patient’s abdomen strongly, with quick thrusts inwards and then upwards in a J shape or «٥» shape in Arabic.

Wrap your arms around the chest of the obese person or obese/pregnant women and apply the chest thrust.
5- If the patient was obese or a pregnant women in her final months, you should apply the chest thrust.
6- How to apply the chest thrust:
   • Stand behind the patient and put your arms under his armpits, surrounding his chest.
   • Hold the fist of one hand with your other hand and put the side of your thumb above the center of the chest bone.
   • Thrust quickly and backwards.
   • In case the patient lost consciousness, apply the steps of cleaning up the blocked air passage for an unconscious adult. (See next paragraph).
Choking due to blocked airways in an adult, unconscious patient

Open the patient’s mouth and remove any objects inside.
1- Turn the patient on his back carefully and raise his head and neck a little bit, call (999) for an ambulance and ask for help.
2- Open the patient’s mouth and push his jaw down and remove any objects inside his mouth with your fingers.
3- Make sure the patient is breathing looking, listening and sensing.

Apply the Artificial Respiration
4- If the patient was not breathing, apply the artificial respiration from mouth to mouth.
5- In case the chest did not rise, change the location of the patient’s head and repeat the breathing attempt.
6- In case the chest did not rise, crouch on the patient’s knees, connect you hands and push 5 times on his abdominal heading to the bottom of his rib cage, on a (J) shape.

7- Repeat raising the patient’s head from the palate and check the mouth whether there are any objects inside.
8- In case of removing any objects, open the airway and check the breathing process.
9- In the event of respiratory arrest after removing any objects, apply the artificial respiration process (see artificial respiration page).
10- In case you did not remove the object, repeat steps 6 and 7.
How to prevent electrical shock

- Check the safety of the circuit breaker on a monthly basis.
- Use only qualified technicians to carry out any electrical changes or maintenance work.
- Do not operate electrical appliances near water or with wet hands.
- Do not overload electrical circuits.
- Replace broken or cracked electrical circuits at once.
- Replace frayed or damaged electrical cords.
- Do not use electrical cords around sharp edges that could wear out the insulation layer.
- Unplug unused electrical appliances and keep the plug in a safe place.

When helping an electrical shock victim:
- Disconnect the electricity supply before touching the patient.
- Use a fibreglass or wooden cane to move the victim away from the source of power/water.
- Perform artificial respiration and CPR.
- Call 999 for medical assistance.
5 – Fire Safety

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Fires are due to human error or to unexpected, natural causes. They have the potential to cause disasters that could lead to human injuries in residential and office buildings and in public places such as hotels, shopping malls, hospitals, schools and factories.

Observing safety practices can help prevent fire disasters. Prevention is the best way to avoid fire hazards.

Therefore, as a responsible individual, you must be aware of fire hazards and the preventive measures that you must apply in your house and at the workplace.

**Fire hazards should be reported to Civil Defence Department – Information – Phone number: 999.**

Complete the fire hazard report form available in our website at www.ncema.gov.ae
# Tips for house residents

**To women...**

1. Do not leave food cooking on the stove unattended. Shut down and unplug any kitchen cooking appliances when they are not in use.
2. Wear suitable clothes when cooking. Avoid long and wide sleeves when working close to a source of heat or fire.

**Avoid overloading electrical circuits**

3. When using electrical appliances, do not overload electrical circuits.
4. Check electrical cords (for kitchen appliances, lights, etc.) and use qualified technicians to repair or replace any frayed cords.

**Carefully handle burning coal and practice safe storage**

5. Make sure to put off burning coal before discarding it in the trash bin.
6. Keep your kitchen clean at all times.
7. Do not store flammable materials close to a fire source.
8. Do not leave unused objects outside your house. They must be disposed of as they are a potential fire hazard.

**To everyone... Keep children away from fire hazards**

9. Do not allow young children to accidentally cause fires. Keep matches, lighters, candles away from their reach at all times and raise their awareness to the dangers of fire.

**Safe handling of firecrackers**

10. Do not neglect watching over your children while they play with firecrackers.
11. Keep firecrackers in a closed container and away from any source of fire.
12. Hold firecrackers at arm’s distance when lighting them and don’t attempt to fire them up more than once.
13. Firecrackers shouldn’t come in contact with flammable materials.
How to avoid cooking stove hazards

• Good ventilation
  Windows should be left open during cooking and flammable materials should be kept at a safe distance from the cooking stove.

• Safely lighting the gas stove
  The correct way to light a gas stove is to hold the match or the lighter close to the holes in the centre of the burner that fire usually comes out of and turn on the gas.

• Checking for gas leaks
  All pipes and connections must be regularly checked (flex pipe and the cut-off valve). Apply leak detection fluid or liquid soap to the rubber pipe and look for any bubbles, which indicates that there is a leak.

• Replace old, worn out parts
  The pipes and stove parts must be checked regularly and replaced when they are worn out or every two years. The gas control valve must be replaced every five years or according to factory instructions.

• Appropriate storage
  Liquid gas cylinders must be stored in an upright position and away from flammable materials at all times. No more than one reserve cylinder should be stored at a time.
Smoke detectors

Smoke inhalation is one of the main causes for death in fatal fires. Most fire victims die of smoke inhalation more than anything else because smoke contains toxic gas and particles. Hence, household smoke detectors can help in signalling a fire to occupants before the smoke intensifies and becomes inescapable.

What is a smoke detector?

It is a computerised device that detects smoke, typically as an indicator for fire, and issues a local audible or visual alarm. It is installed in the ceiling in the kitchen and bedroom areas. Additional detectors can be installed in other rooms around the house to ensure further protection. The device must be regularly maintained and tested by qualified technicians. (Refer to the device's manual book for proper checkup intervals).
Tips for residents of public buildings

Safety and security measures to prevent fire hazards in public buildings are among the most important preventive steps to prevent human casualties in the incidence of fire. Observing administrative criteria and regulations that are determined by the authorities is crucial and requires the cooperation of all building occupants. The following points should be observed:

- Do not overcrowd buildings.
- Do not remove any vital firefighting equipment such as fire hoses and fire extinguishers from their designated locations and make sure to maintain them on a regular basis.
- Do not stack goods or objects in the hallways, at emergency exits and common staircases.
- Do not close exit doors when buildings are occupied or during working hours.
What to do in case of a fire?

If you detect a fire, don’t panic and apply these five simple steps:

1. Evacuate the building.
2. Close the door at the fire site to contain smoke and fumes.
3. Shut down main gas sources if you can reach them and call 999 for help.
4. Try to stop the fire if you can but make sure not to put yourself or others in harm’s way.

5. If you have to escape through the fire, bend down and crawl out on your hands and knees. Smoke and toxic gas usually start collecting from the ceiling down leaving a 30 to 60 cm space of breathable air at the floor level.
How to use the fire extinguisher?

Fire extinguishers are user-friendly. Simply follow these steps:

- Hold the fire extinguisher in an upright position and remove the safety pin.
- Press on the upper handle.
- Aim the hose at the base of the fire at a safe distance of one to one and a half metres from the fire.
- Use circular motion to spray the fire extinguishing liquid to allow it to cover the entire area of the fire.
- When the fire is out, open all windows and doors to allow for proper ventilation.
Setting off the manual alarm system and using the fire hose

In case a fire breaks out, observe the following steps:

• Set off the closest alarm system by shattering the glass lid, which helps in setting off the alarm system in the entire building.
• Open the fire hose valve.
• Direct the hose towards the fire.
• Open the water and direct the hose to the base of the fire.
• Never use water to put out electrical fires.
What to do if you are trapped by fire...

Do not be afraid and do not panic, but remain calm and follow these steps:

1. Move to a safe room, preferably overlooking the street.
2. Close the door behind you and cover the gape at the bottom with a towel or a carpet to prevent smoke from leaking into your room.
3. Ask for help and yell from the window or any other openings to alert passersby and wait for the arrival of firefighters.
4. If you have a landline telephone, call 999 and inform the operator of your location (residence number, apartment, floor, type of fire and number of people trapped.).
5. Do not panic or attempt to jump from the window. Help will be on its way.
What to do if your clothes catch fire...

Follow these steps:

- Stop... don’t panic and don’t run.
- Lie on the floor, wherever you are, and cover your face with both hands to protect it from burns and prevent smoke and fumes inhalation.
- Roll around constantly until the fire is out. Rolling around cuts the oxygen supply to the fire.
6 – Caring for Persons with Special Needs

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People with special needs are an important segment of the community that requires special care and attention in emergencies. Special measures should be taken to ensure their right to care and safety. People in this segment could be senior citizens, people suffering from chronic diseases, people with motor, visual or auditory disabilities.

Responsibility towards special needs people must start with registering them with the Medical Emergency Services register, a Dubai Police initiative aimed at providing attention and care to this segment of society in all of the country's emirates in coordination with the relevant authority in each emirate.

A number of local emergency department offices keep registers of elderly and special needs people, which allows the authorities to determine their whereabouts and move to offer them adequate and swift assistance in emergencies.

Medical emergency services for special needs people show calls from people listed in their registers on the operations centre's screens in Dubai Police. This allows emergency services to attend to their needs promptly at any emergency, in coordination with the competent departments in the UAE.
The following is a series of instructions and guidelines for the assistance of special needs people in emergencies according to their situations and cases:

- Determining their location in the community before and after the emergency to check on their needs in terms of resources, procedures and decisions.
- Benefiting from the expertise of establishments in their immediate community and dealing with them as strategic partners in the planning and exercise process. These include charitable organisations, specialised government entities and special needs individuals.
- Addressing awareness and alertness messages to each of them according to their disabilities.

**People with chronic diseases**

- They must be provided with medical documents signed by their attending physician. The documents must mention the individual's health situation and a list of medicines specifying dosages, a list of all required regular tests in addition to a reserve medical prescription. The list should also include names of prohibited medicines.
- A safe place should be prepared for them with safe and adequate access.
- They must be assisted in reaching the safe location smoothly.
- Relevant authorities should be notified of their location.
- A personal identification card must be prepared for each patient including their full name, ID number, name of physician, list of medicines and contact numbers of family members and relatives.
People with motor disabilities

- A safe and accessible location must be chosen for them. It should provide for their comfort.

- In case the person in question uses a battery operated wheelchair, spare batteries should be provided.
- Care should be taken to avoid bursting in the wheelchair's tires. An air pump and a spare tire should be made available.
- Special consideration must be given to the structural needs of this category of people in shelters such as restrooms and ramps.
Caring for visually impaired people

- A safe shelter with easy access must be set up for them.
- It is preferable to train the individuals in question in the required steps to enter and stay at the shelter and in how to behave in cases of emergency.

Caring for auditory impaired people

- They should be equipped with a special beeper and provided with a sign language interpreter.
- Providing hearing aids to those who need them in addition to spare batteries.
- Instruction signs to the safe shelter must be put in place.
- Special devices must be provided to warn them in cases of emergency.
The emergency kit

Do you know what to do in an emergency?
Are you and your family ready for an emergency?
Do you have the basic materials you need in a case of emergency?

If you aren't prepared, you must think of having an emergency kit ready.
• An emergency kit includes a number of basic materials that you will find beneficial in a case of emergency.
• It can be left in the home shelter or carried to public shelters or during an evacuation.
Basic components of the emergency kit

When preparing the emergency kit, make sure that each member of your family is aware of it and its location in the house. The kit must be ready and easy to carry when needed.

Each family member can have a role to play in preparing for emergencies. Preparing an emergency kit is a simple and inexpensive process. You may need to review the list of items that must be included in the kit and family members can take turns to check on the kit's components on a regular basis.
What basic items are included in an emergency kit?

- NCEMA’s “Your Guide for Emergencies”
- Flashlight and/or candles and matches.
- A radio with spare batteries (To listen to news and updates during emergencies).
- Spare batteries in vacuumed containers.
- A whistle.
- Personal medication.
- First-aid kit.
- Copies of important documents (ID cards and passports) in a water resistant folder.
- Childcare items and/or other personal care items.

Optional items

- List of emergency services contact numbers (NCEMA, Police hotline, telephone numbers of nearest police station, water and electricity authority).
- A list of personal contact numbers (including contact numbers of family members, the office, the school).
- Cash.
- Bottled water (check for expiry date and replace regularly).
- Writing material (paper and pens).
- Spare clothes (slacks and shirt).
Other considerations when preparing the emergency kit

• Should each family member have an emergency kit of their own?
• Be practical and do what is best for your family.
• Do not load the kit with heavy items which could slow you down in an emergency.
• Notice perishable items, check for their expiry dates and replace them regularly.
• Inform family members of the kit's location.

N.B. Items included in the emergency kit are for use in the places you may be evacuated to. They are to be used separately from the stored on-site protection items. And separate and special items must be set aside for chemical emergencies.

Refer to previous chapters for more information on on-site protection measures.
Important telephone numbers

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For the weather forecast call **70001300**
Epilogue

This guidebook is a series of instructions and directives aimed at providing your protection and the protection of your family and environment. These instructions are based on the latest experiences, studies and research in emergency management.
This guidebook has been compiled as per the directives of our wise leadership and its keenness to preserve human beings as a value in themselves by allocating all available capabilities to ensure their security, safety and development.

This guidebook is useful in leading when dealing with emergencies, disasters and crises, whether they are natural or manmade. It provides you with sufficient information and awareness to act safely in difficult situations.

The instructions in this guidebook must be applied with a measure of awareness and responsibility to allow you to prevent risks from happening or to allow you to be prepared to deal with emergencies and reduce their negative effects on individuals and the community.

Remember, preparedness is the most important step towards protection....
Come along with us as we embark on a project to create a distinguished base of volunteers in the UAE to support efforts of national response in emergencies, crises and disasters, to protect the people and preserve achievements.

Join Us Now!

Registration: www.ncema.gov.ae/nvp  -  E-mail: volunteers@ncema.gov.ae
Tel: 024177154, 024177157  -  Mob: 0502133011