


Your Health Guide during Weather challenges





Adapting to seasonal weather changes and dealing with adverse weather conditions is essential. Frequent floods caused by heavy rains can significantly impact public health, leading to injuries and various health issues. This guide provides practical tips to help you stay safe and healthy before, during and after adverse weather events, minimising their impact on your well-being.

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01

Hazards related to weather change and rains

Health hazards associated with rainwater accumulation and stagnant water include various risks:



Physical Hazards



Electrical Hazards



Chemical Hazards



Structural Hazards



Medical Hazards

Physical Hazards

01

Physical Injuries: Accumulated or stagnant water can conceal sharp objects, debris, and submerged electrical lines, posing risks of cuts and injuries to those navigating flooded areas.

02

Car Accidents: Due to slippery roads and decreased traction car accidents may occur.

03

Drowning: The risk of drowning increases during heavy rain and floods, especially for individuals trying to navigate or cross flooded areas.

04

Hail: It varies in size and can damage property, dent vehicles, shatter windows and can be a fatal risk to individuals.

Electrical Hazards

01

Electrocution Risk: Accumulated or stagnant water increases the risk of electrocution, especially near submerged electrical lines. Contact with live wires or equipment can cause severe injuries or fatalities. Additionally, lightning during storms presents further electrical dangers.

02

Lightning is a giant spark of electricity in the atmosphere between clouds, the air, or the ground. It can strike any place on Earth.



Chemical Hazards



Chemical Contamination: Accumulated or stagnant water can collect toxic chemicals from industrial, agricultural, and residential areas. Exposure to these contaminants—whether through skin contact, ingestion, or inhalation—can lead to poisoning, respiratory problems, and skin irritation.

Structural Hazards

Heavy rain and floods can weaken or destroy infrastructure like roads, bridges, buildings, and dams, increasing the risk of collapses, accidents, and injuries from falling debris.



Medical Hazards

01

Waterborne Diseases: Accumulated or stagnant water can harbour pollutants, leading to skin irritations and the spread of waterborne diseases through contact or ingestion.

02

Vector-Borne Diseases: Stagnant water attracts mosquitoes that can transmit diseases through bites, posing a health threat during and after heavy rains and floods.

03

Mould and Fungal Infections: Damp conditions from heavy rains and floods encourage mould and fungi growth in buildings, worsening respiratory issues like asthma and allergies.

04

Wildlife-Related Injuries: Flooding can displace wildlife, increasing encounters with animals like snakes, rodents, and insects. This increases the risk of bites, stings, and infections. Wearing protective clothing and footwear is essential to minimise these risks.

05

Food Safety Concerns: Eating food contaminated by improper storage or contact with flood water can lead to foodborne illnesses, causing symptoms like vomiting and diarrhoea.

02

Hazard Prevention



Prevent Drowning:

- Listen to weather forecasts, follow notifications, and obey stay-at-home orders.
- It is safer to avoid driving during heavy rainfall, but if you must:
 1. Slow down.
 2. Use main roads.
 3. Use dipped headlights.
 4. Maintain a more significant gap between your vehicle and others.
- **Never drive through flooded roads:** Even seemingly shallow water, as little as 6 inches, can cause you to lose control of your vehicle. Additionally, floodwaters may contain hidden hazards that can damage your car.

Hazard Prevention



Lightning Safety:

Stay informed by monitoring weather forecasts.

- **If you are outdoors:**

1. Seek indoor shelter immediately.
2. Avoid elevated areas.
3. Keep away from water sources and conductive materials like metal.
4. Avoid staying in open vehicles.
5. Distance yourself from tall objects and structures such as trees and telephone poles.
6. Do not use corded phones.

- **If you are indoors:**

1. Avoid using water.
2. Stay away from electronic appliances.
3. Keep clear of windows and doors.

Hazard Prevention



Prevent Diarrheal Diseases:

- Avoid contact with or playing in accumulated rainwater and stagnant water.
- Wash your hands after any contact.
- Prevent children from playing in accumulated rainwater or with toys contaminated by floodwater that have not been disinfected.
- Do not use water that may be contaminated by rain accumulation.
- Avoid consuming food that has come into contact with contaminated water.



Prevent Animal and Insect Bites:

- Use insect repellent and follow the label instructions.
- Reapply insect repellent as directed.
- Wear loose-fitting, long-sleeved shirts and long pants.
- Repair holes in window screens.
- Eliminate stagnant water.
- Manage increase in mosquitoes - by contacting the relevant authorities.

Hazard Prevention



Avoid Electrical Injuries:

- Never touch a fallen power line.
- Do not drive through accumulated water if there are downed power lines.
- Never turn power on or off or use an electrical tool or appliance while standing in water.
- If you believe someone has had an electric shock, do not touch them. Call the concerned authority and request emergency medical help.



Hail Injury Prevention:

- Stay updated with weather forecasts.
- Remain indoors and avoid walking under hail.
- Keep away from windows and glass doors.

Hazard Prevention



Avoid Chemical Injuries:

- Listen to announcements or alerts from authorities about chemical safety.
- Avoid entering areas with accumulated rainwater.
- If you suspect chemical poisoning, report it to the concerned authorities.
- Do not touch or move unknown containers.
- If you come into contact with chemicals or contaminated rainwater, wash the affected skin with soap and clean water as soon as possible. Dispose of your clothing safely.

03

Before adverse weather events

As the weather becomes more unpredictable and rainy seasons become more frequent, awareness and preparation are vital to safeguard health and property.

These tips will help ensure a safe and manageable rainy season.



Risk Assessment



Emergency Planning



Emergency Supplies



Home Protection



Staying Informed and Alert

Risk Assessment

01

Understand risks to develop effective preparedness strategies.

02

Consider your geographic location, proximity to water bodies, topography, and past flood history.

03

Identify potential hazards and vulnerabilities in your home, neighbourhood, and community.

04

Understand Weather Patterns: Stay informed about weather forecasts, climate trends, and seasonal patterns to anticipate the likelihood of rain and flood events in your area.



Emergency Planning

Prepare an Emergency Contacts list, including local authorities, emergency services, utility providers, and community organisations. Keep it accessible and share it with family members:

Dubai Ambulance	998
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Civil Defense	997
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Dubai Police	999
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Dubai Municipality	800900
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RTA	8009090
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DEWA	991
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Communication Plan: Establish a communication plan with family members, neighbours, and out-of-town contacts to stay connected and exchange information during rain and flood events.

Emergency Supplies



01

Create a 3-day emergency kit for rainy/flood situations with water, medications, first-aid supplies, flashlights, batteries, blankets, clothes, hygiene items, essential documents, and food.

02

Emergency food supply should:

1. Meet the needs of babies or family members on special diets.
2. Be nonperishable and have a long storage life.
3. Require little or no cooking, water, or refrigeration.

Emergency Supplies

Special Considerations

- Customise your emergency kit for family members with special needs, such as infants, elderly, disabled individuals, and pets.
- Include supplies like baby formula, diapers, prescription medications, medical devices, and pet food to ensure everyone's well-being.
- Ensure that individuals requiring ongoing care have the tools and an alternative power source.

Home Protection

Protect your home from rain damage:

01

Use flood-resistant construction and elevate utilities.

02

Maintain property to prevent water buildup and structural issues.

03

Clean gutters, inspect for leaks and trim trees.

04

Inspect interior ceilings and walls for damage that may indicate a roof leak.

05

Secure doors/windows and prepare sandbags.

06

Check the cleanliness of street drains near your home and contact the relevant authorities for necessary repairs.

07

Learn how to turn off your water, electricity, and gas mains quickly.

08

Avoid storing valuables in the basement and park vehicles on higher ground.

Staying Informed and Alert

01

Weather Monitoring: Stay informed about weather conditions and forecasts by monitoring local weather reports and paying attention to alerts.

02

Avoid obtaining information from unauthorized channels or spreading rumours.



04

During adverse weather events



Tips for staying healthy during adverse weather events:

- Stay informed by monitoring weather forecasts.
- Dress appropriately to stay warm and dry.
- Stay indoors unless necessary.
- Stay away from windows and doors during the storm.
- Avoid roadway underpasses, drainage ditches, low-lying areas and areas where water collects.
- It is safer not to drive during heavy rainfall, **but if you must:**
 - 01 Listen to the notifications and obey the rules
 - 02 Slow down
 - 03 Use main roads
 - 04 Dip your vehicle's headlights
 - 05 Keep a significant gap between your vehicle and others

During adverse weather events

Tips for staying healthy during adverse weather events:



Never drive through flooded roads; even shallow water can be dangerous.



Stay away from power lines and electrical wires.



Practice good hygiene, including frequent handwashing.



Avoid touching your face with unwashed hands.



Ensure proper sanitation and waste management.



Prevent injuries by avoiding rainwater accumulation and wearing protective clothing.



Carry an umbrella or raincoat when outdoors.



Avoid using your mobile phone while walking outside.



Be cautious of slippery surfaces.

During adverse weather events

Tips for staying healthy during adverse weather events:

- Avoid direct contact with stagnant water, whether swimming or wading. It can be a breeding ground for mosquitoes and bacteria.
- Keep your surroundings clean and dry to prevent mould growth and avoid asthma, allergies, and infection.
- Eat a balanced diet to boost immunity.
- Stay hydrated with safe water sources.
- Use safe water sources for drinking, cooking, and hygiene.
- Avoid accumulated rainwater or stagnant water, which can harbour harmful bacteria and viruses.
- Store water safely in clean, covered containers to prevent contamination.

05

Food Safety during Adverse Weather Events and Power Outages



Food Safety Tips During Adverse Weather Events and Power Outages

During emergencies like power outages, ensuring food safety is crucial to prevent foodborne illnesses and maintain well-being. It's essential to differentiate between perishable and non-perishable food items:

- **Perishable items** like meat, seafood, dairy products, and fresh produce, spoil quickly and require refrigeration.
- **Non-perishable items** like canned goods, dried pasta, and peanut butter have a longer shelf life and do not need refrigeration.

Food Safety Tips During Adverse Weather Events and Power Outages

Here are some food safety tips to remember:

- Keep refrigerator and freezer doors closed as much as possible to preserve cold temperatures.
- A full freezer can keep food safe for up to 48 hours without power, while a refrigerator can maintain food safety for about 4 hours.
- Use perishable items from the refrigerator first, then move on to non-perishable ones.
- Use coolers with ice packs to store perishable items if the power outage persists.
- Consume perishable items within a safe timeframe to avoid spoilage.
- Avoid consuming food that may have come in contact with floodwater or stormwater, as it can be contaminated.

Food Safety Tips During Adverse Weather Events and Power Outages

Here are some food safety tips to remember:

- Discard any food with an unusual odour, colour, or texture or if the packaging is damaged.
- Do not refreeze certain foods, including meat, seafood, poultry, ice cream, and dairy products.
- Perishable items left in the fridge for over 2 hours should not be consumed.
- Avoid drinking rainwater or stagnant water, as it may contain harmful bacteria, parasites, and pollutants.
- Clean and sanitise dishes, utensils, and surfaces that touch food using hot, soapy water and a bleach solution.

Danger of Drinking Rainwater or Stagnant Water from the Rain

01

Rainwater and stagnant water may contain harmful bacteria, parasites, and pollutants, which can cause illness if ingested.

02

Drinking or cooking with rainwater or stagnant water is unsafe and may lead to gastrointestinal issues and other health risks.

03

Clean and sanitise dishes, utensils, and surfaces that touch food (like refrigerator drawers) by following these steps:

- Wash with hot, soapy water.
- Rinse with clean, safe water.
- Sanitise by making a solution of 1 cup (8 oz/240 mL) of unscented household chlorine bleach in 5 gallons of clean water.
- Soak items for 1 minute in the bleach solution, ensuring it covers them completely.
- Apply the solution with a cloth for items that cannot be submerged (like countertops).
- Allow items to air dry.

Water Safety during Adverse Weather Events

Ensuring water safety during adverse weather events is vital for public health. Understanding contamination sources, taking preventive measures, and managing water resources help minimise health risks and ensures access to safe drinking water in emergencies.

Here are some steps to ensure water safety:

01

Public Health Authorities: Stay informed about local water advisories and recommendations during rain and floods. Follow authorities' guidance for safe drinking water and reduced health risks.

02

Check water quality with the concerned authority to verify its safety for consumption.

Emergency Water Treatment Options



- **Boiling:**

Boil water for at least one minute to kill harmful bacteria, viruses, and parasites. Let it cool before using it for drinking, cooking, or personal hygiene.

Note: Boiling water may not be 100 per cent effective



- **Filtration:**

Use portable water filtration devices or household filters to remove sediment, particles, and microbial contaminants. Choose certified filters and replace cartridges as recommended.

06

After Adverse Weather Events

Tips for Staying Healthy After Adverse Weather Events:

After adverse weather events, focus on safety and recovery. Assess damage to your home and property, and secure and repair any hazards. Seek guidance from local authorities and insurance providers.



Self-care Actions



Actions for Your Home



Cleaning and Sanitising with Bleach after an Emergency

Self-care Actions



Stay dry: Dry yourself completely after getting wet in the rain to prevent bacterial and fungal growth on the skin.



Change clothes: If your clothes get wet, change into dry ones promptly to avoid catching a cold or skin irritation.



Stay hydrated: Drink plenty of water to maintain hydration, especially during rainy weather when you may be less inclined to drink water.



Eat healthily: Consume a balanced diet rich in vitamins and nutrients to support your immune system, including fruits, vegetables, and whole grains.



Stay active: Engage in physical activity to keep your body moving and boost your mood and immunity.

Self-care Actions



Practice good hygiene: Wash your hands frequently with soap and water, or use hand sanitiser when necessary to prevent the spread of germs.



Get enough rest: Aim for 7-9 hours of quality sleep each night to allow your body to recover and recharge.



Avoid damp areas: Use a dehumidifier to keep living spaces well-ventilated and dry to prevent mould growth.



Monitor your health: Pay attention to any symptoms of illness, such as fever, diarrhoea, skin rashes, or respiratory problems, and seek medical attention if symptoms persist.

Actions for Your Home



Inspect any damage to your property.



Wear protective clothing if dealing with flooded areas (long clothing, gloves, and heavy or rubber boots).



Open doors and windows for at least 30 minutes to air out the area before staying.



If there's a power outage, have an electrician check the system before restoring power.



If you smell gas or suspect a leak, shut off the main gas valve, open windows, leave immediately, and notify the authorities.

Actions for Your Home



Follow food and water safety measures (mentioned above).



Ensure all electrical equipment and appliances are dry before use.



Watch for mould and dry out your home promptly to prevent mould growth.



Have your home's ventilation and air-conditioning system checked and cleaned.

Cleaning and Sanitising with Bleach after an Emergency

Reading and following the safety instructions on any product you use is crucial. Here are the most important safety guidelines when using sanitising products:

- 01 Never mix cleaning products.
- 02 Wear rubber boots, gloves, and eye protection.
- 03 Avoid inhaling product fumes. If using products indoors, open windows and doors to allow fresh air.

Cleaning and Sanitising with Bleach after an Emergency

Steps for Cleaning and Sanitising Food Surfaces and Cans

Food surfaces or areas that may have touched stagnant water like countertops, plates, utensils etc

Note: Throw away wooden cutting boards, baby bottle nipples, and pacifiers.



Wash with soap and hot, clean water and rinse thoroughly with clean water.



Sanitise in a solution of 1 tablespoon of household chlorine bleach (0.5 ounces or =15 mL) in 1 gallon of clean water (3.8 L).



Allow to air dry.

Cleaning and Sanitising with Bleach after an Emergency

Steps for Cleaning and Sanitising Household Surfaces and Items:

Non-food contact surfaces that do not soak up flood water and that may have touched floodwater like floors, sinks, certain toys, and tools.



Clean surface with soap and warm, clean water, brush if needed and rinse thoroughly with clean water.



Sanitise the surfaces using a mixture of 1 cup (240 mL) of bleach to 5 (18.9 L) gallons of water.



Allow to air dry.