

Hurricane Awareness.

A brief guide for residents of Millennium Heights

Whilst the site managers will endeavour to assist during a hurricane they will not be able to deal with everyone individually. It is advisable therefore that all tenants refer to these guidelines published by MHA. As published, these guidelines are not to be taken as an authoritative document on Hurricanes or Hurricane Preparedness.

What is a Hurricane?

A hurricane is potentially a very dangerous weather system that may result in damage to person and property. In the tropics where Barbados is located, the term "hurricane" is synonymous with "tropical cyclone", and refers to a weather system that produces extremely strong winds, thunderstorms, [tornadoes](#), torrential [rain](#), high waves, and [storm surge](#). They are born and sustained over large bodies of warm water, and lose their strength over large land masses.

The Government of Barbados, through its various agencies notifies the general public when such a weather system approaches the Eastern Caribbean region. Notices and bulletins are given over radio and television and are repeated at regular intervals. Visitors to the island are generally given enough advance notice to allow them to evacuate the island if they so choose.

Tropical cyclones are classified, into three main groups, based on intensity.

- **Tropical Depression**

An organised system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds* of 38 mph (33 kt**) or less. However it is already a low pressure system.

- **Tropical Storm**

An organised system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39-73 mph (34-63 kt)

- **Hurricane**

An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 mph (64 kt) or higher

* Sustained winds are defined as a 1-minute average wind measured at about 33 ft (10meters) above the surface.

** 1 knot = 1 nautical mile per hour or 1.15 statute miles per hour.
Abbreviated as "kt".

Hurricanes are categorised according to the strength of their winds using the [SAFFIR-SIMPSON HURRICANE SCALE](#). A Category 1 storm has the lowest wind speeds, while a Category 5 hurricane has the strongest. **These are relative terms, because lower category storms can sometimes inflict greater damage than higher category storms, depending on where they strike and the particular hazards they bring. In fact, tropical storms can also produce significant damage and loss of life, mainly due to flooding.**

Tropical Storms and Hurricanes travel at speeds up to 40 knots across the ground. The systems may be up to 500 miles across and influence weather even beyond these limits. Each tropical storm and hurricane is given a name. This enables a number of storms to be easily identified particularly when there are two or more systems active at the same time.

How will I know there is a hurricane or storm imminent?

The hurricane season is June to November. Listen to the local radio and television, your neighbours and to the site manager.

A Scenario for a hurricane passing over Barbados

The winds will begin to increase in strength; at first gusty and from the North-East. Wind speeds slowly increase and are accompanied by rains squalls. Gradually the winds become ferocious (wind speeds well in excess of 100mph) with pelting, heavy rain (measured in feet per day not inches!) Flooding in low lying areas is to be expected.

As the "eye" of the hurricane passes over the island, the wind and often the rain will suddenly cease, or considerably decrease in strength, for a short period of time. This is not an indication that the hurricane has passed, for soon after hurricane conditions will return with the wind now coming from the opposite direction. Depending on the ground speed of the weather system, it can take possibly 8 to 12 hours for the worst weather

to pass. The further away Millennium is from the centre of the weather system the less the impact will be and the time scale will be altered accordingly.

The strong winds **will** cause structural damage to many buildings, bring down power and telephone lines, up root trees etc. Debris such as signs, roofing material and small items left outside become lethal flying missiles in hurricanes. **Do not attempt to go outside or travel at the height of a storm.**

The greatest potential for loss of life related to a hurricane is storm surge, which historically has claimed 9 out of every ten victims. Not a danger at Millennium, but a good reason not to sit the hurricane out in a coastal hotel.

All services and infrastructure will be severely disrupted; indeed the power company will shutdown power to the entire island as soon as hurricane conditions are present. It may take days or even weeks to restore services to normal. Food supplies will be disrupted because of the loss of power for refrigeration and processing. Without power cooking with the supplied electric ranges at Millennium will not be possible. Petrol and diesel supplies will be disrupted through lack of power at the pumps.

What to do on hearing of a warning

1. Check existing food stocks. Buy in a stock of food and supplies enough to sustain you and your group for at least a 7 - 10 days. These should comprise of:
 - a. For the short term - Bread, Vegetables and Fruit which can be kept in the refrigerator; even if this is not working the ripening of fruit will be delayed. Buy fruit and vegetables that do not require cooking.
 - b. For the longer term - Canned meats and fruit and dry foods, such as crisps, biscuits etc, which do not require refrigeration and will not deteriorate if kept dry. Vegetables that do not generally ripen and will last longer term e.g. potatoes and other root vegetables.
2. Ensure an adequate supply of candles, matches and gas cooking needs, baby nappies and baby requisites. If you are on medication, ensure that your supply is adequate for at least a week.
3. Fill water containers with fresh water -1 gallon per person per day for 3-7 days.
(Drops of Bleach in water for preservation)
4. Buy batteries for portable radio and torches.

5. Fill car with fuel; fuel pumps will not work without power.
6. Draw extra cash as ATM will not be functioning without power. Banks may not quickly re-open as without power computers will be down.
7. If possible obtain some sheets of $\frac{1}{2}$ " plywood as protection for windows and doors. These should be fixed directly to the wall with plugs and screws. Depending on the amount of ply available secure the doors and windows in the master bedroom first and then the master bedroom's bathroom. If sufficient ply is available carry out the same in the following order - lounge windows and doors, kitchen, utility room, bedroom two, bedroom 2 bathroom, bedroom 3 and finally bedroom 3 bathroom. Boarding externally is best but internally will still be of enormous benefit
8. With or without boarding, tape up windows to all rooms with gaffer tape.
9. Place lounge carpet under bed in bedroom 2. Remove all glass tabletops and store under bed in bedroom 2.
10. Remove all pictures and mirrors from the walls and store in bathroom of bedroom 2.
11. Remove all ornaments and store in cupboards.
12. Remove all items from balcony and lay flat in lounge.
13. Remove mattress from bed in master bedroom and place against the master bedroom's windows. Place bed frame on its side and use to hold mattress against door to Romeo and Juliet patio. Back-up bed with other furniture.
14. Bring chairs and cushions, mattresses, towels, clothing, wet weather gear and sturdy shoes, etc into master bedroom.
15. Move to master bedroom - books, toys and games, first aid kit, medicines prescription drugs, radio and spare batteries valuable documents (travel documents and passports) store in a waterproof bag, toiletries, moisture wipes.
16. Pull all curtains in the unit. This will help contain any glass that breaks.
17. If equipment is available mastic around the door of the Romeo and Juliet patio and front door joints on the outside. (Crawl back through window).

18. **The basement of the Clubhouse has been set up as a temporary hurricane shelter for residents of Millennium Heights.** However no supplies or foodstuff is provided, so bring your own if you do decide to seek refuge in the basement of the Clubhouse.
19. Ensure telephone book and list of emergency numbers are by the telephone.
20. Park car away from building and in as sheltered a position as possible e.g. the grassy area surrounded by the walking track.

Hurricanes have been known to produce over nine feet of rain as they pass. Even with that amount, the risk of flooding at Millennium Heights is extremely low although the rain will fill the car parking area quickly. It may eventually flood the area, as the rainwater will not be able to drain away as quickly as it collects. Hence, clause 20 above. The car parking areas and gardens may well disappear under water for a short period of time.

In the event that you are able or have to evacuate the apartment prior to the storm then items 7,8,9,10,11,12, 13, 15, and 16 should be done before leaving the apartment if at all possible

During the height of the storm:

- Do not venture outside at any costs; if anyone is injured you will be unable to get medical help or go to a hospital.
- Retreat to Master bedroom - master bedroom, bathroom and lobby will be the safest areas within the unit.

The biggest danger is from flying objects outside the building; roof tiles are likely to be lost. But window and door glass may become broken by flying objects; this allows wind and rain access to the inside of the unit and internal objects may then become missiles.

- Listen to the radio (portable) for bulletins.
- Remain in master bedroom do not venture through the house. Do not stand by windows. Do not venture outside.

After the storm

- ❖ Preserve water supplies. The hot water system, if undamaged, will provide about 40 gallons of water, which will be drinkable when allowed to cool.
- ❖ Flush toilets with water from the swimming pool.
- ❖ Listen to the news on the radio and note any instruction. It may become necessary to boil all drinking water received through the main supply because of contamination elsewhere.
- ❖ Keep fridge door closed as much as possible.
- ❖ Check that all water brought in for drinking is of a potable quality. (Boil if in doubt).
- ❖ Do not eat any food that has been contaminated by flooding.
- ❖ Wash any tins of food contaminated by flooding in soap and water before opening.
- ❖ Listen to the radio for instructions about fresh food, medical help etc.
- ❖ Tidy up and assess damage. Make a list of damage to the building, pass a copy to site managers.
- ❖ Make a list of damaged household effects.
- ❖ Assist any neighbour who is injured, old or infirm.
- ❖ Listen to the radio for any instructions issued by the Government, police or any other statutory authority.

Be aware that over fifty percent of the population of Barbados has never lived through a hurricane; the last one was in 1955 - over 58 years ago.

MORE INFORMATION ON SAFETY, PREDICTIONS AND VISUALS ETC IS AVAILABLE FROM THE NATIONAL HURRICANE CENTRE WEB SITE ON www.nhc.noaa.gov

As a minimum, prepare yourself to be without food and water for at least 3 days. The following are suggested items for your [hurricane kit](#)

Hurricane Box: A suggested list of hurricane box contents is below:

- Canned and non-perishable foods and sodas
- Water - at least 1 gallon daily per person for 3 to 7 days
- Cooking tools (ie. A non-electric can opener.)
- Camp stove (with fuel)
- Lantern (with fuel)
- Candles and matches
- Several flashlights and fresh batteries.
- A portable, battery operated radio and fresh batteries.
- Battery operated clock
- Cell phone.
- Zip-lock bags to protect valuables.
- A portable cooler and ice.
- Eating utensils.
- Masking tape.
- Bedding, blankets or sleeping bags.
- Valuables and important documents/papers (ie.. insurance, medical records, bank account numbers, National Insurance/Social Security card, etc.) in waterproof containers.
- Plastic drop cloth.
- A few games and books for children.
- Iodine or other water purification tablets.
- Blankets, Pillows and Bedding (1 blanket or sleeping bag per person)
- Clothing - seasonal / rain gear/ sturdy shoes / Gloves / Goggles
- **First Aid Kit / Medicines / Prescription Drugs**
- Special Items - for babies and the elderly
- Toiletries / Hygiene items / Moisture wipes
- Baby food, formula, diapers, and baby wipes.
- Keys
- Vehicle fuel tanks filled
- Pet care items (proper identification/immunization records/medications), ample supply of food and water, a carrier or cage, muzzle and leash
- Pet food
- Plastic garbage bags
- Mosquito repellent
- Bleach, clothesline and pins
- Clothes & dish detergent