



Hurricane Information Sheet

The following document is provided to help you understand the nature of hurricanes and related phenomena, as well as to help you prepare in the eventuality of a hurricane making landfall in Antigua. Please read the material carefully and prepare accordingly. Although storms may develop at any time, the majority of storm activity occurs during the so-called hurricane season, lasting from 1 June until 30 November of each year.

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Storms in the Caribbean as elsewhere may be classified into three broad categories depending on wind strength and other factors. These are tropical depressions, storms and hurricanes. Each is described below:

WHAT IS TROPICAL DEPRESSION?

A tropical depression is a weather system with maximum sustained winds of up to 39 mph.

Although this system poses no significant threat from wind damage, it can cause other damages such as flooding and landslide as a result of heavy rains.

WHAT IS A TROPICAL STORM?

A tropical storm is a strong weather system with maximum sustained winds up to 74 mph.

This system is better organized and could cause significant damage to the following:

- life-line services
- housing stock
- agricultural
- fishing industry
- other commercial services and infrastructure

WHAT IS A HURRICANE?

A hurricane is a large-scale closed circulation system in the atmosphere with low barometric pressure and strong rotating winds, usually accompanied by heavy rainfall and storm surge. An intense weather system with maximum sustain winds of 74 mph and upwards.

Although we must be wary of both depressions and storms, it is a hurricane which poses the most danger to life and property. The rest of this discussion applies to these fearsome storms.

TYPICAL EFFECTS OF HURRICANES

Damage to infrastructure, damage to Housing, Damage/disruption of utility services, Damage to Transportation network, Damage to productive and Economic sectors, Damage/disruption to social services, and Creation of health Hazards. Also cause injury, and loss of life.

CATEGORIES OF HURRICANES

There are five (5) categories of hurricane. A category 1 hurricane is the weakest in strength in terms of wind velocity and get progressively stronger as the category increases, that is, to say category 2 is stronger than category 1, and category 3 is stronger than category 2 and so on. The strongest being a category 5.

CATEGORY 1: Maximum sustained winds of 74-94m.p.h. Wind damage related to this category of hurricane are relatively low. This category may cause minimal damage to lifeline services, may also cause flash – flooding and landslides, damage to property and infrastructure usually minimal. A category 1 hurricane may cause a storm surge of four to five feet in height. A storm surge is temporary rise in seal level caused by water driven on-shore by hurricane force winds and by the low atmospheric pressure in the eye of the hurricane.

CATEGORY 2: Category 2 hurricane has maximum sustained winds of 96-110 m.p.h. This category hurricane usually causes more damage to lifeline services, housing stock, coastline, fishing boats, agriculture, than a category 1 hurricane. The storm surge caused by a category 2 hurricane can reach heights of six to eight feet (6 to 8) depending on the offshore and coastal barriers such as offshore topography reefs, etc.

CATEGORY 3: A category 3 is one that has maximum sustained winds ranging from 111-130 m.p.h. Category 3 hurricanes will have more devastating effect on electricity, telephones, water, housing, agriculture, and economic infrastructure than category 1 and 2. The storm surge of a category 3 hurricane ranges from 9 to 12 feet and has the potential to cause coast-line erosion, under-mining of foundations in close proximity to coast-line and may cause damage to piers/jetties.

CATEGORY 4: A category 4 hurricane has maximum sustained winds of 131-145 m.p.h. This category hurricane historically causes damage of a catastrophic nature to housing stock, agriculture, lifeline services, fisheries, roads, bridges, health services and other key institutions. The economic impact could result in mass unemployment and many persons may be displaced, or made homeless for months or even years.

CATEGORY 5: A category 5 hurricane normally packs winds of a maximum sustained nature upwards of 155 M.P.H. with a gust of 200 M.P.H. or more. This category of

hurricane can be extremely destructive and has the potential to totally wipe out or certainly cripple lifeline services, agriculture, industries, fisheries services and economic activities.

What is meant by the “eye of the hurricane?”

From the FEMA website:

“Hurricane winds blow in a large spiral around a relative calm center known as the “eye.” The “eye” is generally 20 to 30 miles wide, and the storm may extend outward 400 miles. The center, or eye, of a hurricane is relatively calm. The most violent activity takes place in the area immediately around the eye, called the eye-wall.”

When the eye passes over you, it appears that all is over, but beware. As soon as the rest of the hurricane starts to pass over you, the violent winds will start again. So stay indoors until the entire storm passes over.

WHAT TO DO IN THE EVENTUALITY OF A HURRICANE?

Thanks to modern modes of communication, you will be advised well-ahead of time if a hurricane is projected to make landfall. Upon such an announcement by local authorities, you must take the following actions:

Each student will heed all pre-hurricane warnings and advisories after the storm. In preparation for landfall, all students should purchase non-perishable food (food that does not need to be cooked is preferred) sufficient for 3-4 days. The purchase of an ample supply of wet wipes is also recommended. Those students who are not to be evacuated should also purchase drinking water adequate for 4-5 days (see FACs section for the amount of water needed).

Everyone should secure personal ID information (passports, licenses, etc.) in a sturdy waterproof container. Everyone should obtain cash from their bank prior to landfall and secure this in a waterproof container.

Everyone must report to the area coordinator as soon after the storm as possible. Study and heed the following section – FACs:

Frequently Asked Questions (please read carefully):

Where am I going?

Residents of some units may be evacuated to a designated area. You will be advised with plenty of time. Arrangements will be made for bus transportation.

Who should I contact after a hurricane?

Each student should contact his/her assigned area coordinator as soon as possible after the storm. Try and call or e-mail if power is on. The student reps will then contact their designated faculty reps, who will in then contact Dr. Nagra. Faculty will use the contact flow chart.

CONTACT PROCEDURE: Each housing area will be assigned a student and faculty representative. A person from each apartment will contact the student representative after the storm. The student representative will then contact the faculty representative. This communication process will allow the administration to make sure that each student is ok, and to provide help if something is amiss. You will receive information on this later.

If I am to be evacuated, what should I take to the designated shelter?

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|-----------------------------|-------------------|
| 1. Water | 2. Food |
| 3. Medicines | 4. Personal Needs |
| 5. Clothing | 6. Bedding |
| 7. Other important supplies | |

What should I NOT take to a shelter?

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|------------|------------------|
| 1. Pets | 2. Illegal Drugs |
| 3. Alcohol | 4. Weapons |

What should I do while at the shelter?

1. Co-operate with the shelter coordinators and above all, be orderly, polite and patient.

What about personal items?

You know what you need. However, think frugally – space is at a premium (you do not need fashionable clothes or fancy shoes, for instance). **Recommended items** are: Towels, washcloths, soap, combs, toothpaste, toothbrush, eyeglasses/contact lens, special dental needs, Toilet Paper, Insect repellent, Sanitary napkins, deodorant and disinfectant.

Do we need anything else?

- Battery – operated radio and extra batteries
- Flashlights and extra batteries
- Match and lighter
- Portable cooler
- Watch/clock
- Plastic trash bags

Note: All of you should have the above items at home, irrespective of whether or not you will have to move.

How much water should I have?

It is recommended that one gallon of water per person per day is required for emergencies. Use a half-gallon of water for drinking, and the other half-gallon for personal hygiene. Airtight plastic containers are perhaps best for water storage. If you do not have enough pre-stored water, use the following recipe to ensure that your water is safe for drinking:

1. Strain the water through several layers of thick cloth to remove dirt before purifying; or let water settle in a container for 24 hours so that solid particles sink to the bottom.

2. Use one of the following methods to purifying the water:
 - Boil water for ten minutes or:
 - Add four water purification tablets (available in drugs stores) per gallon of water
 - Add twenty (20) drops of two percent tincture of iodine per gallon of water or:
 - Add eight (8) drops of chlorine bleach (without soap, lemon or other additives) per gallon of water.
3. Stir and let stand for 30 minutes.
4. To improve the taste of purifies water, put oxygen back into by pouring it back and forth between two containers.

What about food – what exactly do I need?

1. Purchase foods that require no refrigeration and little preparation – ready to eat canned meats, fruits and vegetables. **Don't forget a can and bottle opener.**
2. Canned juices, milk, soup, etc. You may have to eat the soups cold.
3. Peanut butter, jelly, cheese spread, biscuits, crackers, peanuts, cashew nuts, and chips.
4. Candies, cookies, cereal, fruits, coconut (green and dry).
5. Soft drinks (sodas).
6. Paper towels, plates, cups, cutlery and utensils (plastic).

What medicines should I store?

The school will have a first aid kit available, but you may want to obtain a small one for personal use. In addition, you will need:

- Rubbing alcohol
- Aspirin and non-aspirin
- Antacid (for upset stomach)
- Medicine for diarrhea
- You prescribed medicine. Make sure you let someone know what you are using and when you need it.

TIPS FOR THE CARE OF WATER –DAMAGED ITEMS

1. If the object is still wet, rinse with clear, clean water or a fine hose spray. Clean off dry silt and debris from your belongings with soft brushes or dab without grinding debris into objects.
2. Air dry objects indoors if possible. Sunlight and heat may dry certain materials too quickly, causing splits, war page, and bucking.
3. The best way to inhibit growth of mold and mildew is to reduce humidity. Increase airflow with fans, open windows air conditioners and dehumidifiers.
4. If objects are broken or begin to fall apart, place all broken pieces on a bit of veneer, and detached parts in clearly opened containers. Don not attempt to repair objects until completely dry or, in the case of important materials, until you have consulted with a professional.

5. Documents, books, photograph and works of arts on paper may be extremely fragile when wet. Please use caution when handling. Free the edges of prints and paper objects in mats and frames, If possible. These should be allowed to air dry. Rinse mud off wet photographs with clean, clear water, but do not touch surfaces. Sodden books and paper should also be air-dried, or may be kept in a refrigerator or freezer until a professional can treat them.
6. Textiles, leather and other “organic” materials will also be severely affected by exposure to water and should be allowed top air dry.
7. Remove wet painting from frames, but not from stretchers. Air-dry; face up, away from direct sunlight.
8. Furniture finish and painting surfaces may develop a white haze or bloom from contact with water and humidity. These problems don not require immediate attention. Consult a professional for further treatment.
9. Rinse metal objects exposed to flood waters, mud, or silt with clean, clear water and dry immediately with a clean, soft cloth. Allow heavy mud deposits on large metal object, such as sculpture to dry. Caked mud can be removed later. Consult a professional for further treatment.