DISASTER MITIGATION WORKING GROUP

In the Path of Irma

ISSUE

SPECIAL



# Bounce Back From Irma

When Hurricane Irma swept across the Caribbean in September [2017] inflicting catastrophic damage to several islands, a 19-year-old radio reporter in Anguilla continued to broadcast during the worst of the Category 5 storm....[cont. on pg. 13] (Excerpt from the article :"Caribbean Island Of Anguilla Bounces Back After Intense Hurricane Season")

# Mental Health Impacts of Hurricanes

When natural disasters like Hurricanes Harvey and Irma strike, the number one priority is physical safety. But after the initial emergency passes, media coverage fades and public attention shifts, the process of recovery really begins to take shape. For those affected, that can take months more often, years...[cont. on pg. 20]



Get Bulk waste removed from your premises... [see how on pg. 18]





# Weather 101 (Hurricanes):

#### HOW DO HURRICANES FORM???

Hurricanes are the most violent storms on Earth. They form near the equator over warm ocean waters. Actually, the term hurricane is used only for the large storms that form over the Atlantic Ocean or eastern Pacific Ocean.

The generic, scientific term for these storms, wherever they occur, is tropical cyclone. Other names they are given, depending on where in the world they are born, are typhoons, cyclones, severe tropical cyclones, or severe cyclonic storms. Whatever they are called, the same forces and conditions are at work in forming these giant storms, any of which can cause damage or devastation when they hit land where people live. [cont. on pg. 2]

# In This Issue:

- Weather 101 (How Do Hurricanes Form) ......2  $\Rightarrow$
- ⇒ Hurricane Preparedness: A prepared Home...5
- ⇒ Hurricane Preparedness: Prep. Your Pet......7
- $\Rightarrow$  Is Your Business Ready for A Disaster?.....8
- $\Rightarrow$ Hurricane Irma in Pictures (Aftermath).......11
- Hurricane Aftermath: What to do?......16  $\Rightarrow$
- $\Rightarrow$ Portable Generator Safety......17
- $\Rightarrow$
- The Health Corner......22  $\Rightarrow$
- $\Rightarrow$ Hurricane Humor in pictures......23
- What's Happening In Government?......24  $\Rightarrow$

# Weather 101 (Hurricanes)

# How Do Hurricanes Form (cont. from pg. 1)

Tropical cyclones [hurricanes] are like engines that require warm, moist air as fuel. So the first ingredient needed for a tropical cyclone is warm ocean water. That is why tropical cyclones form only in tropical regions where the ocean is at least 80 degrees F for at least the top 50 meters (about 165 feet) below the surface.



The second ingredient for a tropical cyclone is wind. In the case of hurricanes that form in the Atlantic Ocean, the wind blowing westward across the Atlantic from Africa provides the



necessary ingredient. As the wind passes over the ocean's surface, water evaporates (turns into water vapor) and rises. As it rises, the water vapor cools, and condenses back into large water droplets, forming large cumulonimbus clouds. These clouds are just the beginning.

Picture Source: https://www.sfgate.com/news/article/Hurricane-fuel-warm-moist-air-over-warm-ocean-2606615.php

Meteorologists have divided the development of a tropical cyclone into four stages: Tropical disturbance [Tropical Wave], tropical depression, tropical storm, and full-fledged tropical cyclone [Hurricane].

#### Tropical disturbance [Tropical Wave]

When the water vapor from the warm ocean condenses to form clouds, it releases its heat to the air. The warmed air rises and is pulled into the column of clouds. Evaporation and condensation continue, building the cloud columns higher and larger. A pattern develops, with the wind circulating around a center (like water going down a drain). As the moving column of air encounters more clouds, it becomes a cluster of thunderstorm clouds, called a tropical disturbance.

#### **Tropical depression**

As the thunderstorm grows higher and larger, the air at the top of the cloud column is cooling and becoming unstable. As the heat energy is released from the cooling water vapor, the air at the top of the clouds becomes warmer, making the air pressure higher and causing winds to move outward away from the high pressure area. This movement and warming causes pressures at the surface to drop. Then air at the surface moves toward the lower pressure area, rises, and creates more thunderstorms. Winds in the storm cloud col-



umn spin faster and faster, whipping around in a circular motion. When the winds reach between 25 and 38 mph, the storm is called a tropical depression.

#### **Tropical storm**

When the wind speeds reach 39 mph, the tropical depression becomes a tropical storm. This is also when the storm gets a name. The winds blow faster and begin twisting and turning around the eye, or calm center, of the storm. Wind direction is counterclockwise (west to east) in the northern hemisphere and clockwise (east to west) in the southern hemisphere. This phenomenon is known as the Coriolis effect.



# Weather 101 (Hurricanes)

#### Tropical cyclone [Hurricane]

When the wind speeds reach 74 mph, the storm is officially a tropical cyclone [Hurricane]. The storm is at least 50,000 feet high and around 125 miles across. The eye is around 5 to 30 miles wide. The trade winds (which blow from east to west) push the tropical cyclone toward the west—toward the Caribbean, the Gulf of Mexico, or the southeastern coast of the U.S. The winds and the low air pressure also cause a huge mound of ocean water to pile up near the eye of the tropical cyclone, which can cause monster storm surges when all this water reaches land.

Tropical cyclones usually weaken when they hit land, because they are no longer being fed by the energy from the warm ocean waters. However, they often move far inland, dumping many inches of rain and causing lots of wind damage before they die out completely. *(Learn about the anatomy of Hurricanes and Storm Surge on next page....) Source: https://scijinks.gov/hurricane/* 

# Illustrated Hurricane Category Chart

# Hurricane strength scale

Saffir-Simpson hurricane scale is used to estimate potential damage and flooding expected along a coast from a hurricane landfall.

### CATEGORY 1 Winds 74-95 mph (119-153 kph)

**Storm surge** 4-5 ft. (1.2-1.5 m) **Damage** Minimal; signs, tree branches and power lines blown down; damage to mobile homes

### CATEGORY 2 Winds 96-110 mph (154-177 kph)

**Storm surge** 6-8 ft. (1.8-2.4 m) **Damage** Moderate; some damage to roofs, windows; some downed trees

### CATEGORY 3 Winds 111-129 mph (178-208 kph)

**Storm surge** 9-12 ft. (2.7-3.7 m) **Damage** Extensive; minor damage to buildings, homes; large trees blown down

### CATEGORY 4 Winds 130-156 mph (209-251 kph)

**Storm surge** 13-18 ft. (4.0-5.5 m) **Damage** Extreme; almost total destruction of doors, windows; mobile homes destroyed

### CATEGORY 5 Winds more than 157 mph (252 kph)

Storm surge Higher than 18 ft. (5.5 m) Damage Catastrophic; buildings, roofs, structures destroyed; all trees, shrubs downed Source: U.S. National Hurricane Center Graphic:

Graphic: Staff, TNS

# Weather 101 (Hurricanes)



# Disaster Preparedness & You

### Hurricane Preparedness: A Well Prepared Home

#### SOFFITS

Secure vinyl soffits with a bead of sealant along the joint between the edge of the soffit channel and the wall.

ORM AHE

#### GARAGE DOORS

While newer garage door models come certified for wind loads, older garage doors can be retrofitted with a do-it-yourself kit containing braces and brackets.

#### STRAPS

Hurricane straps are small metal brackets that help make a home's wooden framing more resistant to high winds and uplift.

**ROOF SHINGLES** Re-adhere loose roof shingles that have slipped partially out of place or have slightly upturned edges. Adhere them with 1-inch

dabs of roofing cement.

#### LANDSCAPE

Replace gravel or rock landscaping materials with soft mulch. Trim tree branches and remove dying plants and shrubs. Wind deflector trees will absorb punishing gusts and protect the home from the strongest winds. Live oaks are the best example.

#### GENERATOR

Old fuel left in a generator from last year could be stale, preventing it from starting easily. Read your user's manual for guidance on fuel additives. Do not operate indoors. In recent years, whole-house generators, which kick-in automatically when service is interrupted, have become popular.

WINDOWS During a storm, a broken window can lead to serious problems, as internal wind pressure can build enough to cause structural failure. Protect windows with plywood or shutters.

### HOLES

seal cracks

and holes

the house.

Use caulk to to secure outdoor where wires. items, such cables and as garbage pipes enter cans, flower pots, tables and chairs.

#### YARD DOORS Find a place

Secure double doors with 6-inch surface bolts at the top and bottom of each door. For extra security, when a storm approaches, bar the door by screwing 2-inch-deep U-shaped brackets to each side of the interior door trim and then slipping a 2x4 into the brackets.

### GAS LIGHTS

If you're concerned that winds will snuff out your flame, install a second layer of fixture glass as a wind baffle to your lamp. There is no need to cut off the gas supply to a gaslight before a storm.

Source: http://www.nola.com/homegarden/index.ssf/2014/06/is your house hurricane-season.html

### Aims of Disaster Mitigation

The specific aims of disaster mitigation are as follows:

i) Creating awareness of risk at community level,

ii) To promote local actions through community participation to reduce such risks,

iii) Induction of mitigation measures in the national and regional development plans, land use planning proposals and in project design and appraisal in disaster prone areas.

iv) To assist decision makers (politicians and administrators) to understand the nature and extent of various risks faced by the communities in their area of responsibility, and to assess the economic effects of natural disasters on agriculture, commerce and industry.

v) To demonstrate ways and means to reduce those risks within the limits of national, regional or socio-economic conditions through proper decision making and planning.

vi) To introduce effective measures to implement disaster mitigation plans at the different levels of public administration based on risk assessment and vulnerability analysis.

In brief, mitigation is involvement of community, administration, politicians and decision makers in reduction of risks through local actions and taking mitigation measures in the local and development plans.



# Disaster Preparedness & You

# Hurricane Preparedness Checklist

### Be sure to have the following ready:

Flashlights and battery operated lantern with extra batteries

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- Battery operated radio with extra batteries
- Cases of water bottles (14 day supply recommended)
- Copies of important documents (insurance, car titles)
- Prescription Medicines (extra 2 week supply)
- □ First aid kit (don't forget sunscreen & bug spray)
- □ Fill cars with gas (in case of power outage)
- □ Cash (in case of power outage)
- Pet food and extra water for pet(s), pet license
- □ Non-perishable foods and a can opener (2 weeks supply)
- Extra diapers/wipes and paper supplies such as TP

## If you have to evacuate pack all of the above plus:

- Evacuation backpacks for each family member (clothes, underwear, personal toiletry items)
- □ Sleeping bags, pillows and blanket for each family member
- Toys/games/books for kids
- Boredom busters (that don't require power)
- Car charger for cell phones

## Extras

STORM AHEAD

- Grill, charcoal and matches
- Pack documents, medicines and batteries in plastic baggies
- □ Freeze baggies of water for extra ice

# WRM AHE, Disaster Preparedness & Your Pet

### Hurricane Preparedness: Prepare Your Pets

### **Hurricane Prep Tip: Protect Your Pets**

Creating a pet emergency kit is a vital part of your hurricane preparedness plan. Know what to pack and how to prepare:



- 1. Identify pet-friendly shelters. Make a list of shelters and/or hotels that allow pets. Also, check with friends and family members to see whether they could provide shelter.
- 2. Pack a pet "go" kit with the essentials: food, water, leashes, carriers, first-aid items, toys, bedding, ID tags and vaccination records. Also include a picture of you and your pet in case you get separated.
- 3. Practice makes perfect. Keep an eye on pets during severe weather to find their hiding spots. Learning where they hide will help speed up your evacuation process.
- 4. Sheltering in place. Get your family and pets to the safest spot in the house. Contact the local emergency management office to get a pet rescue decal for your door to alert rescue teams.
- 5. Play it safe. Remember to comfort your pets after a disaster. They may be just as upset as you. If you have to go outside, be mindful of hazardous debris that might harm them.

Medications & Ointments

Benadryl)

Bactine

percent)

Petroleum Jelly

Syptic Powder

Rubbing Alcohol □Sterile Saline Eye Solution

Antibacterial Cleanser

Antibiotic Ointment

□Hydrogen Peroxide (3

Antihistamine (Children's

Source: www.readv.gov

# DIY: Pet First Aid Checklis

- Emergency Contact Info Animal Poison Control \*

  - □ Emergency Vet # □ First-Aid Book for Pets
  - C Known Allergies
  - □ Medications & Dosages
  - Medical Records

  - □ Pet Insurance
  - Det Names, Pics, & Vitals
  - □ Vet Phone #
- 🛛 Tools 4 Materials
  - Adhesive Tape
    Cotton Balls Gauze (roll & pads) Instant Cold Pack Latex Gloves Latex Gloves Q-Tps Towels & Rags Scissors (blunt tip) Syringe or Eye Drapper Tongule Depressors Tonguestants Ā Thermometer

WEEZERG

#### Additional Items

Canned Pumpkin (pure) Epsom Salts Glucose Paste or Syrup □Magnifying Glass Muzzle Nylon Leash Old Plastic Card □Pen Light Razor or Grooming Clippers

Always check with your veterinarian to determine what dosage of medication is right for your pet. While this is a basic list, you may need to customize your first aid kit to fit the medical needs of your pet. Source: https://www.pinterest.com/pin/285345326364536562/

Get More DIY Pet Projects, Deals, & Savings at irresistible pets





In recognition of FEMA's National Animal Disaster Preparedness Day

#### TIPS TO HELP SECURE YOUR PET'S **SAFETY IN AN EMERGENCY:**

THE REAL	7.	Use a <b>microchip or collar ID</b> with up-to-date contact information
	2.	Put a <b>pet rescue decal</b> on the door or window so first responders know a pet may be inside
<b>F</b>	З.	Know where to look for your pet if they're afraid so that you can <b>evacuate</b> faster
B	4.	Have a <b>pet-friendly</b> place in mind to go in case you have to leave your home
6	5.	Carry a <b>picture</b> of your pet in the event of separation
	6.	Take a <b>pet carrier or crate</b> with you for transport and safe keeping
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YOUI	R P	ET EMERGENCY GO-KIT
		SHOULD INCLUDE:
PARTINE ?	$\checkmark$	Basic first aid supplies
		A 3-day supply of bottled water and the pet's preferred food, held in a waterproof container
57		Safety harness and leash
		Waste clean-up supplies
		Medications and a copy of the pet's medical records
Y		List of veterinarians and local pet care organizations
		List of the pet's feeding routine and any behavioral issues
		Comfort items, such as a blanket or favorite toy, to help keep the pet calm and comfortable
www	v.hi	llspet.com/petprepared



# Safety News & Notes

### Being Prepared: Is Your Business Ready for a Disaster?



Prepare, Plan, and Prevail......Whether it's a natural disaster such as a Hurricane, an Earthquake, or a serious accident in the workplace, an unforeseen event can disrupt business operations at any company.

We have seen after the pas-

sage of Hurricane Irma that many businesses were not in a position to get back to their feet or "Ready for Business" for failure in part due to the absence of a Business Continuity Plan.

After all, in an emergency situation, your employees may not be able to come to work. Your suppliers may face a shortage of the materials you need to continue your business activities, or de-



mand for your services may simply decline.

#### The key benefits of a plan

No one can predict the future; however, you can be ready with a sound business continuity plan. Getting a plan in



place shows your employees, shareholders and customers that you are a proactive organization; it improves overall efficiency in your com-

pany and helps you allocate the right financial and human resources to keep your firm up and running during a serious disruption.

Here are 8 basic steps to keep in mind when putting together your plan.

Step 1: Establish an Emergency Preparedness team

Step 2: Identify essential services/functions

Step 3: Identify required skill sets and staff reallocation

Step 4: Identify potential issues

83

Step 5: Prepare a plan for each essential service/function

Step 6: Compare with "Preparedness Checklist"

Step 7: Review with the emergency preparedness team

Step 8: Revise, test and update the plan

(In This edition, we will cover steps 1 through 4 in detail)

#### Step 1: Establish an Emergency Preparedness team

It is a good idea to clearly assign the responsibility for emergency preparedness to a team. Select a few managers/ individuals or an existing committee to take charge of the project.



It is advisable to assign one person to lead the planning process. You should also ensure that this "emergency manager" has the authority to get things done.

As with other business aspects, planning for an emergency relies on the following:

- An understanding of the organizational objectives
- Solid research on the risks
- Creative alternatives to unique challenges
- Reliable decision-making process

What are the key roles and responsibilities for your Emergency Preparedness team?



#### Planning and implementation

1. Develop the Business Continuity Plan (BCP).

2. Establish alert levels and monitor

3. Develop training and crosstraining plans.

4. Identify key business partners such as suppliers and clients and determine if they have a BCP.

5. Assess the potential financial impact of an emergency on the business.

6. Ensure adequate amount of supplies. (emergency safety equipment, such as personal protective equipment, or in the event of a pandemic, hygiene supplies like hand sanitizers, cleaning products, masks, protective barriers, etc.).

7. Local site manager(s) implements the plan.

8. Perform trial runs of the plan.

Policies, procedures, organization

1. Establish policies such as compensation and absences, return to work procedures, telecommuting, flexible work hours and travel restrictions.



2. Define a chain of command for plan implementation.

3. Establish authorities' trigger points and when to implement BCP.

# Safety News & Notes



## Is Your Business Ready for a Disaster?

4. Establish emergency safety policies for the workplace. For example, in the event of a pandemic, policies that will help prevent the spread of influenza, such as promoting respiratory/ hygiene/cough etiquette, and prompt exclusion of people with influenza symptoms are essential.

5. Establish policies for employees who are directly affected by the emergency. For example, in the event of a pandemic, policies for employees who have been exposed.

#### Communications

1. Maintain good communications and manage relations with all staff levels.

2. Advise senior management

3. Instill the importance of the BCP throughout the organization.

4. Liaison with local government agencies such as [the Department of Health Protection].

5. Prepare and disseminate timely and accurate information to all employees.

6. Educate staff about possible emergencies. For example, in the event of a pandemic, give information on signs and symptoms of influenza, modes of transmission, personal and family protection, and response strategies.

7. Evaluate using various forms of technology to maintain communications.

8. Help prepare training on the subject .

9. Ensure that local site managers implement the plan.

10. Setup systems to monitor employees for an emergency.

Use the Planning Team for Business Continuity in an Emergency form (DOC) to clearly identify the team members and coordinator who will create your BCP for emergencies, along with their respective contact information.

#### Step 2: Identify essential services/functions

During an emergency, your business may experience a disruption in your operations due to:

- High staff absenteeism
- Unavailability of supplies and materials

•Interruptions to services like power, transportation and communications.

Objective of the business continuity planning process:

Determine how your organization will maintain essential services/functions in the event of an emergency.

What are essential services?

- A service when not delivered, creates an impact on the health and safety of individuals.
- A service that may lead to the failure of a business unit if activities are not performed in a specified time period.



Continuity Plan

• In some organizations, services

that must be performed to satisfy regulatory requirements.

• A service where if not performed, the impact may be immediate or may occur over a certain time period.

This means that your business may be forced to modify, reduce, or even eliminate specific services/functions to cope with the impacts of the emergency. These impacts may be felt across the organization or localized to specific business units.

As you begin discussions, you may find that you have existing resources that you can use to extract information about essential services in your organization (e.g., pandemic influenza plans, Y2K plan, etc.)

How to determine and prioritize your essential services

1. Complete the Essential Services Ranking template

This will help you create your list of essential services by department or business unit. You then need to rate the degree to which it will negatively impact the various key areas such as financial, employees, customers etc.

2. Prioritize and categorize, use the Essential Services Criticalness Factor template

For each essential service, assign a "degree of criticalness" (Priority A, B or C). Rate the impact on each service such as staff absenteeism, unavailability of critical supplies, or disruptions to essential systems.



• Priority A: Essential services/functions

• Priority B: Services that can be suspended for a short period of time (for example, services that can be suspended for one month).

• Priority C: Services that can be suspended for an extended period of time. This may require a corporate overview.







# Safety News & Notes

#### Being Prepared: Is Your Business Ready for a Disaster?

#### Step 3: Identify required skill sets and staff reallocation



As part of your business continuity planning process, you'll need to identify the number of staff and skills required to perform and maintain the essential services/functions.

Use the Essential Services Criticalness Factor template to help you capture the information necessary to develop your plan.

Try to identify any special requirements necessary to perform the essential services/functions (for example, license to operate heavy machinery).

You may also wish to prepare a list of special tasks and skills required in emergency situations and assign them to appropriate employees, e.g. crisis management team, employee support, IT backup, defining security perimeters etc.

Additional sites with useful information:

- Public Safety Canada
- Canadian Center for Emergency Preparedness
- Canadian Red Cross

#### Step 4: Identify potential issues

Discuss what will happen if you have to reduce, modify or eliminate essential services or functions. Document the following points:

- 1. All the issues that are identified
- 2. Action plans for each issue

# **8**TIPS TOMOLD

PROTECT Yourself	Put on personal protective equipment (gloves, mask, googles) to protect your eyes, nose, mouth and skin.
TOSS!	Take it out! Anything that was wet with flood water and can't be taken outside. Take photos of discarded items for filling insurance claims.
AIR IT Out	Open all doors and windows when you are working, and leave as many open as you safely can when you leave.
CIRCULATE	When electricity is safe to use, use fans and dehumidifiers to remove moisture.
DON'T MIX Cleaners	If you use cleaning products, do not mix cleaning together. DO NOT mix bleach and ammonia because it can create toxic vapors.
SCRUB Surface	Clean with water and detergent. Remove all mold you can see. Dry right away.
DON'T COVER It, remove it	Painting or caulking over mold will not prevent mold from growing. Fix the water problem completely and clean up all the mold before you paint or caulk.
DRY IT UP	Dry your home and everything in it as quickly as possible - within 24 to 48 hours if you can.

Source: https://www.pinterest.com/pin/3448137198996561/

#### **Generator Safety**

Portable generators can be hazardous if used improperly. Carbon Monoxide (CO) is a colorless, tasteless and odorless gas produced by incomplete combustion in internal-combustion engines. CO poses a serious health risk due to its ability to displace Oxygen. Carbon monoxide is fast becoming a killer among people of all ages.

To avoid CO poisoning:

- •Only operate generators outdoors in a well-ventilated, dry area, away from air intakes to the home.
- •Never use generators indoors or in attached garages.

To avoid electrocution:

10

•Plug individual appliances into the generator using heavy duty, outdoor rated cords with a wire gauge adequate for the appliance load.

- •Observe the generator manufacturer's instructions for safe operation.
- •Do not plug the generator into a wall outlet.

•If you must connect the generator into the house wiring, have a qualified electrician hook up the standby electrical system.









# Bounce back from Irma

# Caribbean Island Bounces Back After Intense Hurricane

Nisha Dupuis recounted the experience to *Here & Now's* Robin Young a few days after the broadcast. She stayed on the air and tried to reassure Radio Anguilla listeners during the hurricane as storm shutters covering the station building flapped in the background.

Young checked back in with Dupuis this week, who says Anguilla has made significant progress towards a full recovery.

"The people of Anguilla have proven to be quite resilient after Hurricane Irma," Dupuis says. "Our restoration is still ongoing, but for the most part, you can see that the island is looking up. We do operate on a single economy —tourism being our main source of income — and we were able to reopen for this tourist season."

Irma "substantially damaged" nearly 90 percent of government buildings and the island's electricity infrastructure, according to the International Organization for Migration. The Anguilla electricity company said on its Facebook page that 87 percent of power has been restored on the island, and the utility expects remaining areas to be restored in the next three to five days.

After the storm hammered the island, Anguillan parliamentary secretary Cardigan Connor called 2017 a "bittersweet" year. "We had stellar visitor growth through August, up 21 percent from the U.S. alone, and we were on track for a record year until Sent. 6 kicked in eventhing — windows, doors, roofs, homes, electricity.

until Sept. 6 kicked in everything — windows, doors, roofs, homes, electricity, roads, businesses, hotels," he said in October.

Nearly 30 small hotels, apartments and guesthouses have reopened or are planning to reopen for the holiday season, while the island's major resorts, including Belmond Cap Juluca and the Four Seasons, plan to reopen sometime next year.

Since the hotel industry is a main driver of Anguilla's economy, Dupuis says many people have had to leave to find jobs.

"With the major hotels not opening up until perhaps sometime next year, a lot of people because of unemployment have of course had to seek jobs perhaps in

the U.K. or elsewhere," she says. "We're hopeful that by next year when the most of the reconstruction starts to happen that a lot of people will of course come back home."

The U.K. government recently approved a \$93 million aid package for its Caribbean territories, with the majority of that money going to Anguilla to repair the ferry terminal to St. Martin and other infrastructure, Dupuis says. The U.K. had faced criticism for its slow response to the disaster.

"Our main challenge is to get our people through the next six months," Connor said after the storm. "Our annual budget is \$200 million. The damage from Irma is more than that."

Recovery across the Caribbean has been scattered, as several islands bore the brunt of both Hurricane Irma and Maria. In Puerto Rico, more than 150,000 people have left the island for the mainland U.S. after Maria knocked out the country's fragile power grid. Sixty-four percent of electricity has been restored as of Friday, according to data on a website run by the island's government.

On the U.S. Virgin Islands, 59 percent of electricity is restored, and the Virgin Islands Water and Power Authority expect that number to rise to 90 percent by Christmas.

The sister islands of Antigua and Barbuda represent opposite ends of the spectrum. More than 90 percent of Barbuda's buildings were destroyed and the majority of residents have not returned. Meanwhile, Antigua suffered minimal damage and its airport and hotels reopened days after the storm.

In Anguilla, Dupuis says "people are saying that this is by far the worst hurricane that they've ever experienced." She told Young in September that shortly after the hurricane, the calls she received from listeners stayed in her mind.

"I was terrified. To be honest, when it really sank in for me is the 9-1-1 calls that we were getting because we were also relaying information to the Department of Disaster Management," she said. "This one man — I'll never forget what it sounded like speaking to him — he had a baby in the room, and his shutters were being blown out, and it's like, 'What do we do next?' "

Source:

https://www.npr.org/2017/12/15/571147493/caribbean-island-of-anguilla-bounces-back-after-intense-hurricane-season

See "Anguillan Radio Announcer Stays On Air As Hurricane Irma Tears Across" Island

http://www.wbur.org/hereandnow/2017/09/08/anguillan-radio-announcer-irma





# In The Aftermath Of A Storm

### Tips on what to do and what not to do After a Hurricane

#### PREVENT CARBON MONOXIDE POISONING



Gas or coal-burning equipment creates carbon monoxide. This can include equipment like generators, pressure washers, charcoal grills, and camp stoves. You can't smell it or see it, but if carbon monoxide builds up in your home, it's very dangerous. To keep your family safe:

- Never use gas or coal-burning equipment inside your home, basement, or garage. Keep it outside and at least 20 feet from any window, door, or vent.
- Use a battery-operated or battery backup CO detector any time you use a generator or anything else that burns fuel.
- Never run a car or truck inside a garage attached to your home, even with the garage door open.
- f you have a carbon monoxide detector and it starts beeping, leave your home right away and call 911.

To be safe, <u>learn the symptoms of carbon monoxide poisoning</u>. If you think that carbon monoxide might have made you or a family member sick, go to a doctor or hospital right away.

Check out <u>Carbon Monoxide Poisoning After a Disaster</u> for more information.

Source: https://www.cdc.gov/disasters/hurricanes/be-safe-after.html

### ANGLEC Restoration Completion Announcement



By Anguillian December 25, 2017 11:07

Twas 10 days before Christmas, and 100 days post Hurricane Irma that we flipped the last switch to fully re-energize Anguilla!

On December 15th, 2017 the Anguilla Electricity Company Ltd. (ANGLEC) met its commitment to restore "lights by Christmas" in Anguilla, following an intensive post-Irma restoration exercise.

In celebration of achieving this goal, ANGLEC is pleased to officially announce that island-wide restoration was completed ahead of schedule and without incident – thanks to the hard work of teams from near and far, public support, as well as the unwavering commitment of ANGLEC's employees.

Picture 1 (Left-top): Final major Western connection – ANGLEC teams and employees celebrating the reconnection of Four Seasons Resort with resort staff (Barnes Bay, West End). Picture 2(Right-middle): Teams installing the last sets of transformers in the West . Picture 3(Left-bottom): CEO David Gumbs flipping final switch in West End



We would like to thank the many persons and entities who have supported this initiative on all levels. For those who offered their services, donated water, food and bore other gifts for our teams, we thank you.

To those who cheered us on by offering moral support and encouragement, in person and online, your kindness was invaluable.



We appreciate every sacrifice and commitment made on our behalf and couldn't have completed this restoration without support of our visiting CARILEC members and supporting regional teams, Valard from Canada, the UK Government, the Governor's Office and the Government of Anguilla.

Today we stand 100% restored and, while there is still work to be done in Anguilla, ANGLEC remains committed to serve throughout Anguilla's post Irma recovery.

For more official updates and information please LIKE our Facebook page via <u>Facebook.com/</u> AnguillaElectricity

Source: http://theanguillian.com/2017/12/anglec-restoration-completion-announcement/

# Portable Generator Safety

### Be Safe When Using A Portable Generator (Excerpt from FEMA Fact Sheet)

Release Number: R2 DR-4339-PR FS010 / Release date: October 19, 2017

### Be aware that generators can cause dangerous hazards such as:

- **Garbon monoxide poisoning from the engine exhaust pipe**
- Electrocution
- Fire

Here are some safety tips:

- Be sure to read the manufacturer's instructions on how to use the generator.
- **Carbon monoxide poisoning:** 
  - Do not use a generator indoors or in partially enclosed spaces- including homes, garages, and crawl spaces even those areas with partial ventilation.
  - Do not use a generator near open doors and windows. Using fans will not prevent carbon monoxide build -up in the home. Do not place the generator in front of open windows.
  - Do not assume that you are safe. Be aware that carbon monoxide fumes emitted by gasoline, propane, diesel or gas engines can be fatal. As carbon monoxide is odorless people are not aware of its presence.
  - Install carbon monoxide alarms inside your home to alert you of dangerous levels. Be sure to follow the manufacturer's recommended placement.
- **Electrocution or electric shock:** 
  - Always connect the generator to the appliances with heavy-duty extension cords.
  - Hooking up your generator directly into your home power supply could increase the voltage or could cause a surge to the outside power lines and potentially injure or electrocute an unaware utility lineman. It also bypasses some of the built-in household circuit protection devices. Connecting the generator to your home could cause a surge in electricity that might result in injury or death to yourself or your family.
  - Use a qualified electrician to install the appropriate equipment in accordance with local electrical codes, or ask your utility company to install an appropriate power transfer switch.
- Fire:
  - Keep your generator outside and fuel your generator outside.
  - Do not store fuel for your generator in your house. Gasoline, propane, kerosene, diesel and other flammable liquids should be stored outside living areas in properly labeled, non-glass safety containers.
  - Do not store fuel near a fuel-burning appliance, for example a gas stove.
  - If the fuel is spilled or the container is not sealed properly, invisible vapors from the fuel can travel along the ground and be ignited by the appliance's pilot light or by arcs from electric switches.

Before refueling the generator, turn it off and let it cool down. Gasoline or other flammable liquids spilled on hot engine parts could ignite, and invisible vapors from the fuel can travel along the ground and be ignited by the generator's pilot light or by arcs from electric switches in the appliance.

*Source: https://www.fema.gov/news-release/2017/10/19/4339/fact-sheet-be-safe-when-using-portable-genera*tor

# Portable Generator Safety

### Be Safe When Using A Portable Generator (Excerpt from SEMPRA Energy Utility)

#### Facts You Should Know About Portable Electric Generators:

A portable electric generator can be a valuable tool—but can also be extremely dangerous if not used correctly. If you are thinking about buying a portable generator for back-up electricity, here are some facts you should know before you buy.

#### What can a portable electric generator do for you?

Portable electric generators can be a good way to keep computers, lights, refrigerators and other appliances running if a power outage occurs. And if someone in your home depends on medical equipment, a portable generator can provide much needed power in an emergency.

#### Safety requirements

Connecting a generator to another power source could damage your appliances and seriously injure or kill you or an SDG&E worker who may be working on nearby power lines. If you run a generator during an outage, it cannot be connected to another power source, such as SDG&E's power lines. By law, you are responsible for making sure your generator's electricity cannot feed back into SDG&E's power lines.

When using a portable generator, your life and the lives of others may depend on its safe operation. Follow these safety tips:

- Read all manufacturer instructions. Make sure you understand them and are able to follow them before using the generator.
- Carefully follow all instructions on properly "grounding" the generator.
- The total electric load on your generator should never exceed the manufacturer's rating.
- Good ventilation is important. Generators produce carbon monoxide, a colorless, odorless, poisonous gas that can result in serious injuries, and sometimes even death, if levels become too high. For this reason, your generator should never be operated in your home, garage or other enclosed building. It should always be located outside in a dry location.
- Handle fuel carefully. Turn the generator off to refuel, because gasoline and its vapors can catch on fire if they come in contact with an electrical spark. Store fuel in a properly designed container in a safe location, away from children.
- Use only UL-listed, three-prong extension cords of the proper size with your generator.
- Keep cords out of the way so you don't trip over them, especially in dimly lit areas. Never run cords under rugs or carpets where you may not notice damage that could result in a fire. If you plan to permanently connect your generator to your home wiring, you are required to obtain a permit and inspection from the city or county where you live, and notify SDG&E by calling 1 -800-411-SDGE (7343).

#### How do you select a generator?

Portable generators come in many sizes. Following these steps will help you select the right size for your needs.

#### OUTAGE PREPAREDNESS

Determine the "constant wattage." A portable generator operates a limited number of appliances and lights. Choose the items you want to run with the generator and add up the wattage they use. That total is your "constant wattage," or the energy you will need on a constant basis to keep these items running. For help determining wattage information, see the "Calculating Energy Usage" section below.

Determine the "start-up wattage." Knowing the "constant wattage" of your appliances is not good enough. Appliances with motors, such as refrigerators, freezers and air conditioners, can require two to three times their normal wattage when the motor starts up. The generator you pick must have a surge rating that meets or exceeds your added "start-up wattage" needs. To determine your "start-up wattage," identify the appliances with motors that you will run with your generator. Double the "constant wattage" of these items, then add up the totals.

#### Match voltage ratings.

Most appliances are rated at 120-volts, but some larger electric appliances, such as ovens, clothes dryers and well pumps, are rated at 240-volts. Portable generators may berated at 120-volts only, or a combination of 120- and 240-volts. Make sure the generator you choose matches the voltage ratings of the items you want to run.

#### Calculating Energy Use

To purchase the right generator, you'll need to know the wattage of the appliances you plan to run. First, check the owner's manual and serial plate on your appliance for the wattage (or watts) rating. If wattage is not listed, find the amperage (amps) and voltage (volts) ratings on the same plate. Multiply amps by volts to get the wattage.

You can simply visit an any online source for information on the average wattage used by some common appliances. Wattage consumption of some common appliances / electronic devices are listed here:

Refrogerator / Freezer = 500-800 watts; Light bulb = 100 watts; AM / FM Radio = 50-200 watts; Television = 300-400 watts; Computer = 400 watts.

# A Word From Your Government

#### NOTICE FROM THE DEPARTMENT OF PHYSICAL PLANNING



The Land Development Control Committee, The Anguilla Building board and the Electrical Inspectorate, c/o The Department of Physical Planning, would like to remind the General Public of the need to apply in writing to The Department for Planning and Building permission.

All persons and businesses wishing to carry out building work in relation to altering their building or erecting new buildings or structures, post Hurricane Irma, without the benefit of full planning permission are required to apply in writing to The Department for full approvals before commencing work.

The Anguilla Building Board would like to further advise the general public of the potential risks to persons or businesses carrying out work in relation to erecting or re-erecting wooden, concrete or steel structures, and the reconstruction of new roofs, without the benefits of The Board's review and guidance in accordance with the Anguilla Building Code.

Out of the need to better secure life and property in the inevitable reality of future hurri-

canes, many persons or businesses are replacing damaged or completely destroyed, relatively lighter wooden roofs, with heavier reinforced concrete roof slabs. In some instances, reinforced concrete roof slabs are being poured on significantly older or perhaps insufficient structures; and even with the intention of adding a future second floor.

Of particular concern in these instances, is the risk of older walls or walls of insufficient bearing capacity failing under heavier loads presented by newly installed reinforced concrete roofs. Then the escalated future risks these structures present in the event of other possible natural disasters, such as tremors and earthquakes, is also of grave concern.

It is therefore strongly advised that persons seeking to carry out post Irma replacement of wooden roofs and construction/reconstruction of concrete roofs seek the advice and technical guidance of The Anguilla Building Board before commencing any works.

The Electrical Inspectorate would like to advise the general public of its ongoing routine inspections. However, it also advises all property owners to have an independent, qualified electrician inspect their electrical installation before being inspected by the Government Electrical Inspector. Hanging or damaged service pipes/fittings, missing weather heads and building or roof damage will hinder you from having power restored to your property.

The Electrical Inspectorate would like to further remind the General Public that any new electrical works being carried out, including electrical upgrades, relocation of meters, replacement of damaged or blown down electrical meters, etc., are required to go through the normal electrical inspection procedure. (This entails filling out the Specification



of Electrical Installation Form and being inspected by the Electrical Inspector and being issued an Inspection Certificate when the installation has passed inspection). All developments which were previously on a construction line but have carried out upgrades and relocations of their meters also need to follow the Inspection Procedures.

Please be reminded that no electrical Inspections will be carried out for any new construction being done (including alterations and additions to existing buildings) without the benefit of Planning and/or Building approval. Please avoid delays by ensuring that you have all the requisite permits.





# A Word From Your Government

#### PUBLIC ANNOUNCEMENT FROM THE DEPARTMENT OF HEALTH PROTECTION ENVIRONMENTAL HEALTH UNIT

Due to the post Hurricane Irma restoration process, the Department of Health Protection wishes to remind the general public of the *Collection and Disposal of Refuse Regulations of The Public Health Act.* 

According to the Collection And Disposal Of Refuse Regulations,

Section 3: Duty to keep premises clean:

The owner or occupier of every dwelling house and the owner or person in charge of every other building shall—

According to subsection (a) at all times keep his premises in every respect clean and free from offensive matter or refuse and shall collect or cause to be collected all refuse and place it in the receptacle provided for the purpose;

Section 6 Removal of excess refuse:

"Where the refuse shall exceed in amount that normally produced by the average household in the opinion of the Environmental Health Department, the occupier of the premises shall provide for the removal at his own expense."



The Department encourages the general public to discard of garbage in a manner that would reduce vector, rodent and pest infestations and any risk to public health. It is important that persons dispose of their respective garbage in the respective collection receptacle provided or truck any non-household waste materials to the Corito Landfill Site.



Persons wanting bulky waste materials to be removed from their premises can visit the Environmental Health Unit (upstairs the Babrow Building South of Digicel) for a bulky waste form or contact the office at 264-497-2631 for more information. The Department of Health Protection is working steadfastly in ensuring that designated waste collection operators are working diligently in removing refuse from the designated sites.

### The Mitigation Working Group Fire Escape Plan Challenge

The Mitigation Working Group encourages you to develop a Fire Escape Plan for your home or business today!!! Visit the web for tips & ideas to developing your Fire Escape Plan, then Contact the Anguilla Fire & Rescue Service for Fire Training, and a review of your Fire Plan.



# A Word From Your Government

2017 FIRE PREVENTION THEME "EVERY SECOND COUNTS, PLAN TWO WAYS OUT" ANGUILLA FIRE & RESCUE SERVICE (AFRS)



If you're responsible for the health and safety of everyone in a single or multi-storey building, what should be top of your priorities? Below is the Anguilla Fire and Rescue Service's five (5) major priorities to consider.

1. Everyone is your responsibility

It is the employer's or service provider's responsibility to evacuate all people from a building in an emergency – i.e., it is no longer the responsibility of the fire service to facilitate the evacuation of non-domestic premises.



Neglect to prepare properly for evacuating employees, visitors, students or the mobility-impaired,

you can be found guilty of failing to provide a duty of care which carries a charge of corporate manslaughter in workplace cases.

#### 2. Who have you trained?

Evacuation procedures should be set in place along with designated, trained, team members who will assist those in need during the evacuation process. Those employees must undergo practical training in the operation of any evacuation equipment.

They should practice using this equipment when an evacuation drill takes place - at recommended six monthly intervals.

#### 3. Keep an eye on your PEEP

Pre-planning is essential. Ensuring the needs of all employees, visitors and the mobility-impaired are identified and a Personal Emergency Evacuation Plan, known as a 'PEEP' or a 'GEEP' (General Emergency Evacuation Plan), is devised by the relevant person responsible to comply with the Fire Safety Order.

Questions your PEEP needs to answer:

- Can wheelchair-users be accommodated with emergency evacuation chairs?
- How might my team transfer the wheelchair-user into an emergency assistive device? How do I establish if they state they don't wish to be evacuated by using evacuation devices?

### 4. Practice, practice, practice

The plan should be tested in regular drills, to ensure all staff involved are aware of the procedures and receive a copy of the relevant PEEP. When planning for an emergency in a public access building where mobility-impaired or people with disabilities have total access, a PEEP would be insufficient. The responsible person would need to devise a GEEP to accommodate the needs of everyone.



#### 5. What about the vulnerable?

Evacuation chairs have proved to be the most efficient and user-friendly, enabling the operator and passenger to safely exit the building. Due to more than one person possibly needing assistance, other types of evacuation product may be required such as slide sheets, rescue mats or stretchers in addition to evacuation chairs.

All evacuation aids must be located in a designated refuge point which is specified in the buildings fire strategy. Each fire exit has to accommodate the able-bodied and mobility-impaired therefore all equipment has to be readily available and accessible at the refuge point.







#### The Mental Health Impact of Hurricanes Harvey and Irma (By Erica Hoffman on September 15, 2017)

[Continued from page 1]

Mental illnesses like post-traumatic stress disorder (PTSD), chronic depression, anxiety and addiction are commonly reported weeks and months after a traumatic event. In the case of Hurricane Katrina, nearly half of survivors suffered from some form of mental health distress after the storm subsided, according to a 2012 study in the American Journal of Orthopsychiatry. After Hurricane Sandy, more than 20 percent of residents reported PTSD, 33 percent reported depression and 46 percent reported anxiety.

Survivors of traumatic events may begin to experience additional symptoms including:

- 1) Interpersonal changes like withdrawal
- 2) Irritability and mood swings
- *3)* A sense of isolation
- *4) Trouble sleeping*
- 5) Confusion

In the face of destruction and despair, it is necessary for people to take the time to mourn their losses, and for communities to create safe spaces for them to do so. Simply being aware of the psychological effects caused by hurricanes, and knowing how to respond appropriately, can make a world of difference.

Mental Health First Aid can help those who have experienced disasters like Hurricanes Harvey and Irma. It is a training program that teaches people how to recognize and respond to symptoms of mental health problems. It is intentional about bringing together and strengthening communities through dedicated conversations about what mental health is and what it may look like.

Our Mental Health First Aid USA team and our committed network of Instructors are here to support you through your recovery. Please don't hesitate to reach out if you have any questions or concerns regarding mental health, trauma or coping skills. And if you or someone you know is experiencing symptoms of trauma, these resources may be a good place to start.

Please be on the lookout for additional information about how Mental Health First Aid USA and the National Council for Behavioral Health are committed to helping the people impacted by Hurricanes Harvey and Irma.

Source: https://www.mentalhealthfirstaid.org/2017/09/hurricanes-harvey-irma-mental-health/

Post Hurricane Irma Workshop In Anguilla (By Anguillan on November 20, 2017)

There are likely to be a number of persons in Anguilla who are still suffering psychological or other traumatic effects as a result of the impact of Hurricane Irma.

In recognition of this, the University of the West Indies, through its Caribbean Centre for Disaster Risk Reduction, and in collaboration with the Ministry and Department of Social Development, hosted a three-day Post Disaster Community-Based Psychological Support Workshop from Wednesday to Friday this week, November 15-17, at the Anguilla Community College.

Dr. Phyllis Fleming-Banks, Manager of the UWI Open Campus for the British Overseas Territories in the Caribbean, spoke about the workshop. "It is part of the overall response mounted by the University of the West Indies in response to the devastation caused by Hurricanes Irma and Maria in September," she stated. "The UWI, through its Caribbean Centre for Disaster and Risk Reduction in the office of the Vice Chancellor, has been working closely with the Caribbean Disaster Emergency Management Agency (CEDMA) as well as Heads of Government.

"Phase one, or the Rapid Response phase is concentrated on relief aid and experts to assist in the areas of greatest need as identified by the impacted states including, for example, infrastructure, housing, agriculture, tourism and psycho-social counselling. Phase two will see recovery and rehabilitation focusing on mobilization of funding and expertise to assist in the restoration of the affected islands with special priority in the areas of education and health-care."

The workshop facilitators are Mrs. Arna Elliott Rattray and Ms. Feona Charles of the UWI Department of Sociology, Psychology and Social Work assisted by their colleague, Mrs. Kimberley Hinds Heron.

Permanent Secretary in the Ministry of Social Development and Health, Mr. Foster Rogers, who welcomed the facilitators to Anguilla, spoke to some extent on the devastation of the island by Hurricane Irma and the recovery efforts.

The 25-30 participants included first responders following the hurricane, students from the UWI Open Campus in Anguilla, staff members of the Ministry and Department of Social Development and Health, and other persons in the community.

Source: http://theanguillian.com/2017/11/post-hurricane-irma-workshop-in-anguilla/

# The fun Corner



### Hurricane Humor in Pictures

#### Hurricane Irma is now a Cat5 storm!



### CUSTOMS DUTY EXEMPTIONS ON GOODS IMPORTED FOR REBUILDING EFFORTS FOLLOWING HURRICANE IRMA (Written by: MOFEDICT)

#### November 06, 2017

The Governor in Council under section 76(1) (b) of the Customs Act, R.S.A c169 has ratified the Customs (Duty Exemption) (Hurricane Irma Relief) (No. 2) Regulations for the tax exemption on goods imported for rebuilding purposes following the destruction caused by Hurricane Irma.

The Regulations provide for the duty-free importation of building materials and furnishings by churches, benevolent societies, community organizations, private businesses and private individuals for the purpose of facilitating the recovery and reconstruction process through the repair and refurnishing of their buildings.

The exemption covers a period of 117 days commencing the 6th day of September 2017 until the 31st day of December 2017. It should be noted that the exemption also covers the waiver of the Customs Service Charge of six percent (6%) for the same period. However, the Customs Administrative Fee of five percent (5%) for Duty Free processing will be due and payable.

Individuals and entities seeking customs duty exemptions for these purposes will be required to submit an application to the Ministry of Finance. Customs Duty exemption will be granted to individuals and entities whose losses due to Hurricane Irma have been verified by the Ministry of Finance. Any person who makes any false statement on his application for exemption or produces any supporting document which is false commits an offence and is liable on conviction to a fine of \$10,000 and 6 months imprisonment in accordance with the Customs Act, R.S.A c169

Should anyone have any questions or concerns, they can contact the Ministry of Finance at mofgoa@gov.ai or (264) 497 2547 or the Customs Department at (264) 497-2513.

*Source: http://gov.ai/story.php?id=383* 

### A WORD FROM THE NATIONAL DISASTER MITIGATION WORKING GROUP

**DISASTER** - A natural or humancaused event which causes intense negative impacts on people, goods, services and/or the environment, exceeding the affected community's capability to respond.

#### **EMERGENCY MANAGEMENT -**

The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular **preparedness**, response and initial recovery steps.

**MITIGATION** - Measures taken to reduce the loss of life, livelihood and property by disasters, either by reducing vulnerability or by modifying the hazard, where possible.



**RESPONSE** - Actions carried out in a disaster situation with the objective to save lives, alleviate suffering and reduce economic losses.

**RECOVERY** - The medium and long-term repair of physical, social and economic damage and the return of affected structures to a condition equal to or better than before the disaster.

**DEVELOPMENT** - The cumulative and lasting increase, tied to social changes, in the quantity and quality of a community's goods, services and resources, with the purpose of maintaining and improving the security and quality of human life.

Definition source: http://www.gov.ai/documents/Anguilla%20Draft%20National%20CDM%20Policy.pdf