

COLLIER COUNTY EMERGENCY MANAGEMENT

# ALL HAZARDS GUIDE

✔ Plan    ✔ Prepare    ✔ Pass It On



Emergency  
Management





Dear Residents and Guests of Collier County

The All-Hazards Guide is your ready reference guide to help you, your family, and your business prepare for those dangerous and potentially deadly days caused by Mother Nature such as flood, fire, hurricane, and tornados. This year's guide is especially important as we have made changes to our discussions on hurricane storm surge and evacuation areas.

Our partners at the Federal Emergency Management Agency and the National Hurricane Center have provided substantial research and resources on the issue of storm surge flooding preceding, and in some cases following, a hurricane passing through Collier County. In recent years, we have been lucky regarding our storm surge inundations levels being very low. The shape of our coastline and the challenges posed by many factors in the Gulf of Mexico along with new computer simulations and lessons learned from hurricane Katrina paint a much greater storm surge potential for our community. Listening to local radio, television, government information, and NOAA weather radio becomes more important than ever to help ensure your safety, especially with a significant hurricane and greater storm surge levels.

In addition to the information in this guide, please take a few minutes and visit Collier County Emergency Management's website at: [www.collierem.org](http://www.collierem.org) or [www.colliergov.net](http://www.colliergov.net). We have a number of great Web links and interesting information to help you become better prepared. Please take personal responsibility and be proactive in your disaster preparedness and evacuation efforts to help keep your family, home, and business as disaster-resistant as possible. We strongly recommend that you make sure you have a battery-powered radio and NOAA Weather radio to help you stay informed about current conditions, evacuation routes, and shelters.

Collier County is blessed with a number of professional, not-for-profit disaster response partners like the American Red Cross, Salvation Army, Goodwill Industries, and others. Please extend your support to these organizations and donate your time, talents, and resources to help them support our community during times of need. Volunteering your time during emergency and non-emergency situations will no doubt be rewarding during these difficult times.

Stay Ready, Stay Safe, and Stay Informed.....

Sincerely,

A handwritten signature in cursive script that reads "Dan E. Summers".

Dan E. Summers, CEM  
Director



# Collier County Emergency Preparedness Information Guide

THE FIRST 72 HOURS ARE UP TO YOU!

Collier County residents and visitors need to address their personal emergency preparedness. The following resources are available to assist the public in emergency preparedness:

**Collier County Emergency Management**

(239) 252-3600  
8075 Lely Cultural Parkway #445  
Naples, FL 34113  
www.collierem.org

**Collier County Emergency Medical Services (EMS)**

(239) 252-3740  
8075 Lely Cultural Parkway #267  
Naples, FL 34113  
www.colliergov.net/ems

**Ochopee Fire Control and Rescue District**

(239) 695-4114  
201 Buckner Ave. N.  
Ochopee, FL 34141

**Isles of Capri Fire Control and Rescue District**

(239) 394-8770  
175 Capri Boulevard  
Naples, FL 34113

**Community Emergency Response Teams (CERT)**

Contact your local fire department for volunteer opportunities

**Salvation Army**

(239) 775-9447  
www.salvationarmy.org

**Florida Department of Health — Collier County**

(239) 252-8200  
3339 Tamiami Trail E., Building H  
Naples, FL 34112  
www.collierprepares.org

**Flood Map Information Unincorporated Collier**

County (239) 252-2942  
City of Naples (239) 213-5039  
City of Marco Island (239) 389-5023  
Everglades City (239) 695-3781

**Small Business Administration**

1-800-659-2955  
www.sba.gov

**Persons with Special Needs Program (PSN)**

(239) 252-3600  
\*(239) 252-3637 (TTY)  
\*(239) 252-8444  
8075 Lely Cultural Parkway #445  
Naples, FL 34113  
www.collierem.org

**Collier Emergency Hotline**

\*(239) 252-8444 or 311 or 211  
\*When EOC Activated

**American Red Cross (ARC)**

(239) 596-6868  
2610 Northbrooke Plaza Drive  
Naples, FL 34119  
www.colliercountyredcross.org  
www.redcross.org

**Collier County Sheriff's Office**

(239) 252-9300  
3319 Tamiami Trail E., Building J  
Naples, FL 34112  
www.colliersheriff.org  
www.fdle.state.fl.us

**Domestic Animal Services**

(239) 252-7387  
7610 Davis Boulevard  
Naples, FL 34104  
www.collierpets.com

**Pet Shelter Registration**

www.collierpets.com

**Florida Power and Light**

(800) 468-8243  
www.fpl.com

**Lee County Electric Cooperative**

(800) 599-2356  
www.lceec.net

**Collier County Public Utilities Division**

(239) 252-2380  
www.colliergov.net/publicutilities

**Federal Emergency Management Agency (FEMA)**

(800) 462-7585-TTY  
(800) 621-3362  
500 C Street  
S.W. Washington D.C. 20472  
*Are You Ready?* Pub H-34  
www.fema.gov  
http://www.training.fema.gov/  
www.floodsmart.gov

**Personal and Family Preparedness**

www.ready.gov

**Florida Division of Emergency Management (FDEM)**

(800) 226-4329-TTY  
(850) 413-9969  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399  
www.floridadisaster.org

**Collier County Public Schools**

(239) 377-0001  
Emergency Hotline 888-994-6397  
5775 Osceola Trail  
Naples, FL 34109  
www.collier.k12.fl.us

**Weather Information**

www.weather.gov/miami  
www.weather.com

**National Hurricane Center**

www.nhc.noaa.gov

**Naples Airport Authority**

(239) 643-0733  
160 Aviation Drive North  
Naples, FL 34104  
www.flyneples.com  
www.tsa.gov

**Collier County Neighborhood Watch**

(239) 252-0700  
2373 E Horseshoe Drive  
Naples, FL 34104  
www.colliersheriff.org

**Medical Examiner's Office District 20**

www.naplesme.org  
www.fluiddb.com

**Collier County Citizen Corps**

(239) 252-3600  
www.citizenccorps.gov  
www.floridadisaster.org  
www.collierem.org

**Stay Connected with Collier County**

www.colliergov.net  
facebook.com/CollierGov  
twitter.com/CollierPIO  
youtube.com/CollierGov  
CTV: Comcast/CenturyLink Chan. 97,  
Marco Island Chan. 11

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# The Saffir-Simpson Hurricane Wind Scale

In 1971 civil engineer, Herbert Saffir and meteorologist Dr. Robert Simpson developed the Saffir-Simpson Hurricane Scale. The initial scale showed the expected damage to structures based upon wind speed and storm surge effects.

In 2010, the National Hurricane Center removed storm surge and barometric pressure from the Saffir-Simpson Scale, turning it into the Saffir-Simpson Hurricane Wind Scale. The scale provides examples of the type of damage and impacts in the United States associated with winds of the indicated intensity. The Saffir-Simpson Hurricane Wind Scale provides information on wind impacts only and does not provide commentary or information on the other impacts or characteristics associated with tropical cyclones.

## Category One Hurricane:

Sustained winds of 74-95 mph, 64-82 kt, or 119-153 km/hr. Very dangerous winds will produce some damage. People, pets, and livestock could be injured or killed by flying or falling debris.

Older (pre-1994 construction) mobile homes could be destroyed, especially if they are not anchored properly. Newer mobile homes that are anchored properly can sustain damage to shingles or metal roof coverings, loss of vinyl siding, as well as damage to carports, sunrooms, or lanais. Poorly built frame homes can experience major damage. Unprotected windows may break if struck by flying debris. Masonry chimneys can be toppled. Well-built frame homes can experience damage to roof shingles, vinyl siding, soffit panels, and gutters. Overhead doors may fail if not secured properly. Failure of aluminum, screened-in enclosures can occur. Roof coverings and siding may be partially removed. Broken glass will pose a threat, and there may be damage to commercial signage, fences, and canopies.

Large branches of trees will snap, and trees may topple. Extensive damage to power lines and poles will likely result in power outages.

## Category Two Hurricane:

Sustained winds of 96-110 mph, 83-95 kt, or 154-177 km/hr. Extremely dangerous winds will cause extensive damage. Substantial risk of injury or death to people, pets, and livestock due to flying and falling debris.

Older (pre-1994 construction) mobile homes have a very high chance of being destroyed. Newer

mobile homes can also be destroyed. Poorly built frame homes have a high chance of having their roof structures removed, especially if not anchored properly. Unprotected windows will have a high chance of being broken by flying debris. Well-built frame homes could sustain major roof and siding damage. Failure of aluminum, screened-in enclosures will be common. Unreinforced masonry walls can collapse. High percentage of roof and siding damage to buildings. Windows in high-rise buildings can be broken. Broken glass will pose a significant danger, and commercial signage, fences, and canopies will be damaged or destroyed.

Many shallow rooted trees will be snapped or uprooted. Near-total power loss is expected; clean water could become scarce due to system failures.

## Category Three Hurricane:

Sustained winds of 111-129 mph, 96-112 kt, or 178-208 km/hr. Devastating damage will occur. High risk of injury or death to people, pets, and livestock due to debris.

Nearly all older (pre-1994) mobile homes will be destroyed. Most newer mobile homes will sustain severe damage with potential for complete roof failure and wall collapse. Poorly built frame homes can be destroyed. Well-built frame homes can experience major damage. Unprotected windows will be broken by flying debris. Isolated structural damage to wood or steel framing can occur. Complete failure of older metal buildings is possible, and older unreinforced masonry buildings can collapse. High percentage of roof and siding damage to buildings. Numerous windows will be blown out of high-rise buildings, and most commercial signage, fences, and canopies will be destroyed.

Many trees will be snapped or uprooted. Electricity and water will be unavailable.

## Category Four Hurricane:

Sustained winds of 130-156 mph, 113-136 kt, or 209-251 km/hr. Catastrophic damage will occur. Very high risk of injury or death to people, pets, and livestock due to debris.

Nearly all older (pre-1994) and a high percentage of newer mobile homes will be destroyed. Poorly built homes can sustain complete collapse of all walls as well as the loss of the roof structure. Well built homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Extensive damage to roof coverings, windows,

and doors will occur. Windborne debris will break most unprotected windows and penetrate some protected windows. High percentage of structural damage to the top floors of apartment buildings. High percentage of collapse in older unreinforced masonry buildings. Steel frame in older industrial buildings can collapse. Most windows will be blown out of high-rise buildings, and nearly all commercial signage, fences, and canopies will be destroyed.

Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate areas. Power outages and long-term water shortages may last for many months; most of the area will be uninhabitable during that period.

## Category Five Hurricane:

Sustained winds greater than 157mph, greater than 137 kt, or greater than 252 km/hr. Catastrophic damage will occur. Very high risk of injury or death to people, pets, and livestock from debris, even if indoors in mobile homes or framed homes.

Almost complete destruction of all mobile homes will occur, regardless of age or construction. High percentage of frame homes will be destroyed. Extensive damage to roof covers, windows, and doors will occur. Windborne debris damage will occur to nearly all unprotected windows and many protected windows. Complete collapse of many older metal buildings can occur. Most unreinforced masonry walls will fail leading to the collapse of buildings. Significant damage to wood roofs will occur. High percentage of industrial and low-rise apartment buildings will be destroyed. Nearly all windows will be blown out of high-rise buildings, and nearly all commercial signage, fences, and canopies will be destroyed.

Nearly all trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate areas. Power outages and long-term water shortages may last for many months; most of the area will be uninhabitable during that period.

# Hurricane Hazards

Living in Southwest Florida means that each year from June 1st through November 30th we are at risk of being impacted by a hurricane. Unfortunately, previous hurricane seasons are not accurate indicators of our present risk each year. Whether it is forecasted to be a “higher than average,” “average,” or “lower than average” season, activity-wise, our risk is the same. It only ever takes one hurricane to affect a community!



## Wind

Hurricanes are categorized by sustained winds of 74 mph to 157+ mph. Wind caused damage are to some degree dependent upon the local building codes in effect, how well, and how long they have been enforced.

## Tornadoes

Tornadoes may form in the rain bands of a hurricane and cause significant damage. Tornadoes are commonly found in the right front quadrant of the storm. These tornadoes are not as intense as those in the Midwest tornado belt, but they can inflict tremendous damage with little or no warning.

## Storm Surge

Storm surge is an abnormal rise of water generated by a storm that moves ashore prior to and during a hurricane making landfall. As the storm makes landfall, inundation levels (depth of water above ground level) of 2 to 30 feet may occur along the coastal areas, and major rivers of Southwest Florida. This is enough to inundate most populated areas.

Damage severity depends upon the hurricane’s size, forward speed, its direction of movement and intensity. Storm surge has the potential to cause the greatest loss of life, cripple communications,

cause sewers and storm water basins to back up and contaminate drinking water supplies. Storm surge can leave road, streets and bridges filled with sand, debris and, in some cases structurally unstable.

## Heavy Rain

Over the past 30 years, freshwater flooding has caused more drowning deaths than storm surge flooding. Torrential rains associated with slow moving, or stationary, tropical storms and hurricanes on average can produce 16 inches of rain within a 24 – 36 hour period. Heavy rains can create massive health problems and have a disastrous effect on a community’s ability to recover quickly.

## When a Hurricane or Tropical Storm Threatens Southwest Florida

As a hurricane or tropical storm moves closer to Southwest Florida, your local Emergency Management Agency will be activated. Emergency Management personnel will remain in frequent contact with the National Hurricane Center and the local National Weather Service office to closely monitor the development and progress of the hurricane or tropical storm.

Your local Emergency Management Agency will utilize the area media outlets to provide frequent updates on the storm, recommend emergency protective actions, and issue evacuation orders.

## Storm Surge Considerations in Southwest Florida

Many of our coastal roads used as evacuation routes could be underwater well in advance of the storm, restricting your use of them as evacuation routes. Be prepared to evacuate early and inland to avoid the high winds and heavy rains that precede the arrival of a storm.

If you do not evacuate when ordered you will be without fire rescue, law enforcement or emergency medical support until the waters subside.



## Community Emergency Response Team (CERT)

CERT members support emergency response agencies by assisting with public information and preparedness projects in their community, and can provide things like basic first aid and rehab support during planned events and activities. CERT Teams can be called upon to help run emergency shelters or operate Points of Distribution (POD) to help give out emergency supplies after a disaster. CERT is a federally sponsored program recognized by the Federal Emergency Management Agency (FEMA) and the Department of Homeland Security (DHS).

If you are interested in joining CERT please contact your local Emergency Management Office, or visit [www.citizencorps.gov/cert/index.shtm](http://www.citizencorps.gov/cert/index.shtm).



## StormReady

StormReady is a voluntary program created by the National Weather Service to help communities prepare and protect residents from hazardous weather.

To become StormReady, complete the application and submit to your local NWS office. Your application will be reviewed by StormReady Review Board, and a team will visit with you to formally discuss your application. Upon approval, you will receive a formal notification letter from the local NWS Office Director, two StormReady signs and instructions for these and other benefits to your community. StormReady recognition is good for three years from the date of your formal announcement. For more information go to [www.stormready.noaa.gov/communities.htm](http://www.stormready.noaa.gov/communities.htm).



# Plan! Prepare! Pass it on!

Each Spring the clock “springs forward” one hour, batteries get changed in smoke detectors and we scramble to file our taxes on time. This is also the time to make, or review, your Emergency Disaster Plan. Many of the same documents you use to complete your taxes are important to your Emergency Disaster Plan. Creating an Emergency Disaster Plan does not have to be an overwhelming, or time consuming endeavor.

On any ordinary day you may have some ideas about the hazards in your community that put you at risk, and how you would respond to those risks if they became actual emergencies. The key is to write down those hazards and your response plan(s).

## Plan!

Every good plan starts with a hazard analysis. “What am I at risk from?” This depends on where you live – in the country, in the state, and in your county. As a Florida resident, your risks are primarily from naturally occurring incidents: thunderstorms, lightning, structure fire, tornadoes, fresh water flooding, drought, wildland fires and hurricanes.

Many of these risks are common and require small or minimal response on your part (e.g. staying indoors, clearing brush from around your home, or watering restrictions). A few however are not as frequent and when they occur, the effects are widespread and may even require you to evacuate to another building, or another area of the state.

Once you’ve made a list of the hazards you face, the next step is evaluate what you need in order to respond to those hazards. For the more common and “smaller” hazards this can be as simple as having a designated meeting place and phone number for family members to call should you become separated, an evacuation map of your home in case of fire, and a family/friend/ hotel/motel nearby you will stay at in case your home is damaged.

However, for the larger, less frequently occurring hazards you may encounter, a bit more planning will be needed because they also have the potential to affect your entire community. It is for these events that you need to have supplies (i.e. food, water, medicine, etc.) and copies of your important papers. You will also need to consider where you will shelter out of the area, and if you have pets, whether they can shelter with you. It is also important to plan for a place to temporarily call home in the event that your home is destroyed and resources are limited in your community afterwards.



## Prepare!

Before you realize it, you have written your plan. Now that you have identified what you will need to survive the hazards you have identified, take a look around your home. Ask yourself: “Do we already have the supplies we need?” Check your pantry, is there enough food for 3 days that does not need to be cooked? If you have food that needs to be cooked, do you have a gas or charcoal grill that you can use outside your home to cook with? As you go through

your list of supplies, try to identify items that you can purchase in little amounts throughout the year in order to spread out the cost.

## Pass It On!

You have a Plan. You have taken your inventory of supplies and are Preparing. Now you can Pass It On by sitting down with your family to talk through your Emergency Disaster Plan. Share the Plan for each type of hazard, the expected response, and where important documents, including the Plan, and supplies are located. Make sure to include any family or friends located out of the area, which have a role in your Plan, in the conversation. Encourage co-workers, friends and other family members to take a little time out of their day to write down their Emergency Disaster Plan. Review your employer’s Emergency Disaster Plan to ensure you know what is expected of you during an emergency, and if it may affect your Family Emergency Disaster Plan.

**Plan** ✓ (done)

**Prepare** ✓ (done)

**Pass It On** ✓ (on-going)

## Now What?

Enjoy everything that Southwest Florida has to offer each day, practice your Emergency Disaster Plan with your family at least once a year, and review your Emergency Disaster Plan at least once a year for any changes or additions. Then when there are events that are covered by your Plan, use it. When there are hazards that threaten your community, listen to your local Emergency Management Agency and activate your Family Emergency Disaster Plan accordingly.

Most Importantly: Evacuate when ordered to do so by your Local Emergency Management Agency. Also check with your local Emergency Management Agency for Family Emergency Disaster Plan assistance, and ask if they have a fill-in-the-blank template you can use to make it even easier to complete.

If you have a family member living in an Assisted Living Facility, or Nursing Home, it is important to know what the Facility’s Emergency Plan covers. Refer to page 11 for a list of questions you should be asking to ensure your family member’s safety during an emergency.

Knowledge is not enough to protect you, your family and your home. You must put this information to work. Don’t wait until the storm is nearly here, or it will be too late!

# Prepare an All-Hazards Supply Kit for Emergencies

## Get A Kit

Having a basic survival kit on-hand to sustain yourself and your family after an emergency is an essential part of preparation.

Think first about basic survival needs: fresh water, food, clean air and warmth. Store your supplies in a portable container as close as possible to an exit and review the contents of your kit at least once a year.

Include in your kit:

- 3-day supply of water: 1 gallon per person per day but you may need more; consult with your doctor
- 3-day supply of non-perishable food that meets your dietary requirements



## 3-day supply of water

- Manual can opener or pop top cans/containers and eating utensils
- Medical equipment and assistive devices
- Medications and a list of prescription name, dosage, frequency, and doctor contact information
- Cooler with an ice pack if medications need to be refrigerated
- Medical alert tags or bracelets to identify your disability-related need
- Supplies for a service animal or pets including 3-day supply of food and water, ID tags, proof of vaccinations, and veterinarian contact information
- Flashlight
- Portable, battery-powered radio (preferably NOAA Weather Radio)
- Extra batteries
- Basic first aid kit and manual



Prepare a survival kit.

- Warm clothing and blankets depending on the time of year
- Whistle
- Filter face masks (Dust Mask)
- List of emergency contact information
- Photocopies of important documents (birth certificate, license, insurances information, etc.)
- Cash and coins (cash dispensing machines may not work due to electricity or there is no cash available)
- Sanitation and hygiene items (hand sanitizer, denture care, moist towelettes, absorbent pads, toilet paper, feminine hygiene products, etc.)
- Household chlorine bleach and medicine dropper: 9 parts water to 1 part bleach can be used as a disinfectant, 16 drops of bleach to 1 gallon of water can be used to treat water in an emergency (do not use scented, color safe, or bleaches with added cleaners)



## 3-day supply of non-perishable food

- Items for infants (formula, diapers, bottles, and pacifiers) if applicable

This supply kit is a good start, but depending on your situation, you may need more or less items to survive after an emergency. Another good idea is to use a suitcase with rollers to make it easier on yourself and your family.

Also if you don't feel like shopping for these items separately, you can purchase them online or at stores in your area.

Finally, you do need to understand that emergency responders may not be able to get to you right away and having a kit will help you between the period of time you are rescued after a disaster.

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*Hopefully you will not have to ever use the kit. Are you willing to risk being unprepared when a natural disaster occurs?*

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Pack your survival kit in a suitcase with rollers.



# Preparing Your Boat for a Hurricane



## Precautions for Boat Owners

The key to protecting your boat from hurricanes or any severe, threatening weather is planning, preparation, and timely action. The following precautions and checklists are meant as guidelines only.

Each boat owner needs a plan unique to the type of boat, local boating environment, the severe weather conditions likely to occur in that region, and the characteristics of safe havens and/or plans for protection. Listen to your local Emergency Management office for specific evacuations related to boats.

1. Prior to the hurricane season, develop a detailed plan of action to secure your vessel in the marina. Seniors, who are boat owners should remember their physical limitations and perhaps develop a relationship with a neighbor to work together in securing the vessel. If permitted, remove your boat from the threatened area, or take your boat to a previously identified hurricane refuge. Before hurricane season, practice your plan to ensure that it works.
2. Arrange for a friend to carry out your plans if you are out of town during hurricane season.
3. Check your lease or storage rental agreement with the marina or storage area. Know your responsibilities and liabilities as well as those of the marina.
4. Consolidate all records, including insurance policies, a recent photo of your vessel, boat lease agreement with the marina or storage area, and telephone numbers of appropriate authorities (i.e., harbor master, Coast Guard, insurance agent, etc.) and keep them in your possession.
5. Maintain an inventory of both the items removed and those left on board. Items of value should be marked so that they can be readily identified, if dispersed by the storm.
6. When a hurricane is approaching, and after you

have made anchoring or mooring provisions, remove all moveable equipment such as canvas, sails, dinghies, radios, cushions, Biminis and roller furling sails. Lash down everything you cannot remove such as tillers, wheels, booms, etc. Make sure the electrical system is cut off unless you plan to leave the boat in the water, and remove the battery to eliminate the risk of fire or other damage. Tape off all openings.

## Trailerable Boats

1. Be sure your tow vehicle is capable of properly and adequately moving the boat. Check to insure your trailer's tires, bearings and axle are all in good condition.
2. Once at a "safe" place, lash your boat to the trailer and place blocks between the frame members and the axle inside each wheel. Owners of light weight boats, after consulting with the manufacturer, may wish to consider letting about half the air out of the tires, then filling the boat one-third full of water to help hold it down. (The blocks will prevent damage to the springs from the additional weight of the water.)
3. Secure your boat with heavy lines to fixed objects. Try to pick a location that allows you to secure it from all four directions, because hurricane winds rotate and change direction. It can be tied down to screw anchors secured into the ground. Remember that trees are often blown over during a hurricane.

## Non-Trailerable Boats in Dry Storage

When selecting a "safe" location, be sure to consider whether storm surge could rise into the area. Never leave a boat on davits or on a hydro lift. Although not recommended for boats over 23 ft., if you leave a boat on a hydro lift, check lift cables and motor for fraying prior to use to avoid a snapped lift cable injury, then lash the lift to the dock pilings. Raise the lift as high as possible but not beyond the lift poles. Open the drains and tilt lift to drain water.

## Non-Trailerable Boats in Wet Storage

The owner of a large boat, usually one moored in a berth, has three options:

1. Secure the boat in the marina berth.
2. Moor the boat in a previously identified safe area.
3. Haul the boat.

Each action requires a separate strategy. Another

alternative, running from the storm, is not encouraged except for large commercial vessels—unless there is enough time to get your boat beyond the storm's projected path.

## Boats Remaining in Marina Berth

1. Double all lines. Rig crossing spring lines fore and aft. Attach lines high on pilings to allow for tidal rise or surge. Make sure lines will not slip off pilings. Inspect pilings and choose those that seem strongest and tallest and are properly installed. The longer the dock lines, the better a boat will be at coping with high tides. It is also essential to double up on all lines and use chafe protectors at any potential chafe points.
2. Install fenders to protect the boat from rubbing against the pier, pilings and other boats. Cover all lines at rough points to prevent chafing. Wrap with tape, rags, and rubber hoses, etc.
3. Assess the attachment of primary cleats, winches and chocks. These should have substantial back plates and adequate stainless steel bolt sizes.
4. Batteries should be fully charged and checked to ensure their capability to run automatic bilge pumps for the duration of the storm. Consider backup batteries. Cut off all devices consuming electricity except bilge pumps.



Boat pileup after Hurricane Ivan.



# Local Shelter Issues

## Shelter Space

There is a substantial shelter space deficit throughout SW Florida. So, if you have a safe place to go, plan to use that location instead of a Public Shelter. However, if you have no safe place to go, shelters will be open. Here are some important points to remember if you choose to go to a public shelter:

When you arrive, you will be required to register as a resident of the shelter. This ensures accountability of who is inside the shelter and an accurate count for capacity. If you leave the shelter, check out with the shelter registration desk. Accountability is important for your safety. Because shelters are not hotels, we are not able to provide any conveniences or luxuries. Food and water will be available but, there may be a slight delay in initial service. If you want or need special food items, bring them with you, this is highly encouraged. Bring your family's disaster survival kit to ensure you have what you need. Below are some items you should consider bringing when going to a shelter:

- Drinking water (initially)
- Snacks or special foods
- Lawn chair or bed roll
- Book or electronic entertainment item with headphones
- Change of clothing

Remember weapons and alcoholic beverages are not permitted. The only animals allowed are service animals. If you need to shelter your pet, contact Domestic Animal Services to reserve a spot in our pet-friendly shelter.

## People with Special Needs

Some people have medical issues that cannot be accommodated in a regular public shelter. For those people whose health would quickly and dramatically deteriorate in a public shelter and have no other safe place to go, there are Special Care shelters available. You must complete an application to see if your medical issues qualify for a Special Care shelter. There are specific criteria and requirements to be eligible for the Special Care shelter, which may vary somewhat from county to county. You must have a caregiver with you during your stay at the Special Care shelter.

During an emergency we have very limited staff working in the shelters, so your caregiver is critically important for your health and safety. There is limited hospital sheltering for people who are extremely high



A stay at a public shelter may become a necessity during or after a storm.

risk and cannot survive outside a hospital environment. Your physician must recommend hospital sheltering and give specific details of your medical situation. You may be responsible for fees associated with hospital sheltering. As at any other shelter, you must bring your emergency supplies with you. In any emergency situation you should have a plan for where you will go if you cannot return to your home because of damage. Your local Emergency Management office can help you register and answer any questions.

## People with Disabilities

Estimates vary, but as many as one in four people live with some type of disability. Sometimes signs are obvious, a wheelchair, a guide dog or a cane. However, many times a disability is not obvious. Whether obvious or not, awareness and sensitivity toward persons with disabilities makes good sense.

Practicing disability etiquette is an easy way to help people with disabilities feel more welcome and comfortable. Here are a few things anyone can do to make a person with a disability feel more at ease in any situation. Remember, a person with a disability is a person first. Ask before you help. Don't assume a person with a disability needs your help with a task.

If you are asked for help, be sure to ask what kind of assistance is needed. Be sensitive regarding personal space and physical contact. Respect personal space and remember that people often consider their equipment part of their person. Think before you speak. Speak to the person, not their aide or companion. Converse with a person with a disability as you would any other person. Get permission from a parent or guardian before interacting with children.

People with disabilities must assume personal

responsibility and be prepared for an emergency. The basic steps of a personal safety plan are the same for everyone. Where will you go? How will you get there? What will you take? How much time will you need? How will you communicate with those who need to know? With minor modification, the information in this Guide is applicable to everyone. You must take responsibility for yourself in an emergency. Part of any plan is to identify and use all available resources. If you need help or have questions, contact your local Emergency Management agency. There are people and tools to help you become better prepared.

## Protect Your Pets

In a hurricane, pets are subject to the same hazards as we are and have many of the same needs. Remember, Public Shelters do not permit pets! The best plan is to identify a safer location that allows pets (e.g. a friend's home or hotel). That way, you can keep your pets with you when you evacuate. Check the Internet to help locate hotels that accept pets. You should also have a supply kit for your pets. Include non-perishable food, water and medications. Keep a sturdy cage or carrier to comfortably hold your pet and/or a collar and leash. Make sure all vaccinations are up-to-date and keep a copy of the records. Also keep several good photos to help identify your pet should you become separated. Place identification on your pet's collar or consider using a microchip to identify your pet. Consult your veterinarian for more details.

## ITEMS TO REMEMBER:

- Never leave your pet(s) outside during a storm.
- Never leave a cat with a dog, even if the two are friends.
- Confine and keep small pets (birds, hamsters, etc.) away from cats and dogs.
- Dangerous animals should be secured in special crates or cages.
- Any animals posing a danger will be at risk of being destroyed. All animal facilities in the path of a hurricane are subject to some degree of damage or flooding. Keep in mind, boarding kennels may be without electricity or potable water and have limited personnel and supplies for days to weeks following a disaster. For more information, visit the Collier County Emergency Management Website at [www.collierem.org](http://www.collierem.org).

# Utility Tips

## WATER / SEWER

Locate the water shut-off valve for your residence. The valve is generally on the side of the house nearest the water meter/backflow prevention device, or may be inside the garage. Test the water shut-off valve to be sure it is operational. If the shut-off valve is not operational, have it repaired or replaced.

Turn the water shut-off valve to the off position if you are evacuating your residence prior to a storm. This will help minimize damage to the interior of your home should a pipe burst.

Follow the manufacturer's recommendations for turning off your water heater and unplug it; or, switch off the circuit breaker. Turn off the power and shut-off the water valve to your irrigation system.

You may want to consider filling a clean bathtub or other large containers with water before the storm arrives. In the event water service is disrupted, that water can be used for drinking, cooking, or for flushing the toilet.

Locate your sewer cleanout. The cleanouts are typically made of PVC and/or plastic piping, and are generally located within three to five feet from a structure, and again between the property line and the street. Remove any shrubbery or obstructions in case utility service personnel need to access the cleanout. Verify that the cleanout is capped. If the cap is broken or missing, please call Collier County Wastewater Collections at 252-2600.

In the Collier County Water-Sewer District, the two water treatment plants and the two wastewater treatment plants are equipped with generators capable of maintain operations during power outages. Despite the fact that you may still have water service, water conservation during power outages is a necessity.

Not all wastewater lift stations have generators. During power outages, the wastewater lift station serving your neighborhood may be without power. When the power is restored to your home, do not assume that power has been restored to all lift stations. It is important to curtail the amount of water used to avoid overwhelming the wastewater collections system that may not yet be fully functioning.

- Avoid running dishwashers and clothes washers.
- Limit the amount of water used for showering.
- Limit the amount of toilet flushing.

## ELECTRICITY

A strong storm or hurricane can cause significant damage, resulting in widespread power outages. Restoration efforts must be prioritized, starting with facilities that provide the most critical services:

- Damaged power plants and power lines from the plants, since these must be fixed before service can be restored anywhere.
- Organizations that provide critical infrastructure functions to the community, such as hospitals, police, and fire stations.
- Major power lines that serve large numbers of customers.
- Smaller power lines such as service to a single street.
- Individual homes or businesses still without power.

## KEEPING SAFE DURING A POWER OUTAGE

When a power outage occurs, safety is a very important concern. Here are some basic tips that will keep you, your family and your employees safe while the power is out:

- Assume all cables and wires are energized and stay away.
- Keep away from flooded and debris-laden areas because they may be hiding downed lines.
- Run your portable generator outside your house or building, and connect appliances or equipment directly to it.
- If you leave your home, turn off appliances that may have been on when the power went out, or turn off your main breaker.
- Avoid driving in damaged areas. You might interfere with rescue or restoration efforts, as well as jeopardize your own safety.

Help keep telephone lines clear for emergency calls. Only call to report downed power lines, or if your neighbors' power has been restored and you are without electricity. Don't trim trees or remove debris located near downed power lines. If you must remove debris from your home, don't pile it under or near electrical lines or equipment.

Any damage to your home's electric system must be repaired by a licensed electrician and inspected by a designated agency before power can be restored.

Check your weather-head (located on the roof where your service connects to the pole) and your meter box to make sure they are not damaged.

If you suspect there is water in the walls or ceiling, stay away from electrical outlets and contact a licensed electrician to repair the damage.

If you need to live in temporary quarters on your property, a licensed electrician can install a temporary service pole. After the pole is inspected by a designated agency, your electric utility can provide power.

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*For more information,  
visit the Collier County  
Emergency Management Website  
at [www.collierem.org](http://www.collierem.org)*

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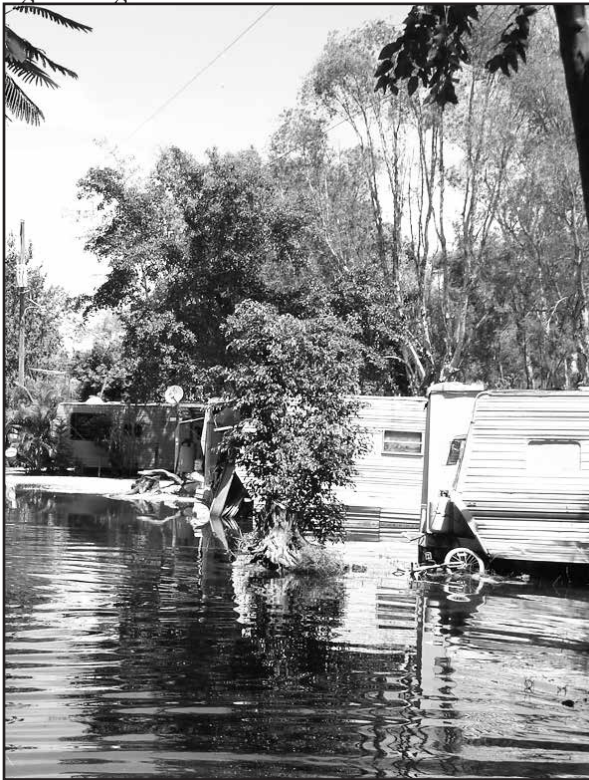
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# After The Storm

After major storms our lives can change drastically. These disasters affect everyone to some extent. Relief supplies and other aid will be arriving as quickly as possible, but it may take several days. Try to remain calm, patient and understanding. Your attitude affects you and everyone around you. Remember that the longest and hardest part of dealing with a hurricane is the recovery.

There may be residual flooding and roads may be blocked for days or weeks, making damaged areas inaccessible. This may mean that you will not be allowed back to your home for days, or possibly weeks. Emergency workers want your return home to be as safe as possible and need time to clear safe access and secure hazards. Listen to local media for re-entry information and do not go into unsafe areas. Drive only if absolutely necessary and avoid flooded roads and washed out bridges. Do not go sightseeing.



If you evacuated out of the area, consider staying away for a few extra days. Before you decide to return, consider the following:

- Power will be out for an undetermined period of time. This means no air conditioning, no lights, no refrigeration, no water pump and in many cases no stove.
- Telephone service will be out or limited. This includes 911 calling. Lack of power and damaged facilities will affect both landline telephones and cellular telephone service. Even if your phone works, use it only for emergencies.
- Municipal water supplies may be unsafe to drink without boiling or chemical treatment. Treat all water as unsafe until you are notified that it is safe.
- Sewer lift stations will not work, meaning toilets will not flush and sinks not drain, and they may backup into your home or property. When you do return, some damage may not be readily apparent, so here are some things to keep in mind for your safety.

Inspect your home for damage. Check for water and sewer line damage. Check the electrical system. Turn off the main breaker until you are sure the system is safe. Check for natural gas and/or bottled gas leaks. Do not enter or stay in a structure if you smell gas.

Be careful when you go outside and pay attention to where you walk and stand. Avoid any downed wires or standing water. Report downed wires to your utility company or to emergency services.

Check above you for low hanging objects or loose things that could fall.

Beware of wild animals that might be dangerous. Fire ants, bees, wasps, snakes, rodents and wild animals will be seeking high ground. They can create health and safety hazards.

Be careful of domestic animals, even ones you know. They may be frightened or injured and more dangerous than you expect.

Do not connect generators to your house wiring! Service personnel can be killed, or fires started elsewhere. Use your generator only in a well-ventilated area and shut it down during re-fueling.



**REMEMBER:** Insurance companies will send special disaster assistance teams, as will the State and Federal governments. Still, it may be more than a week before those teams are able to get into operation.

Take pictures of the damage, both to the house and its contents for insurance claims.

Have all your insurance documents ready and be patient!

When help does arrive, some may be in the form of the unscrupulous fortune seekers. Do not sign repair contracts until you have checked out the contractor. Do not pay for any services until the work has been completed.

Ask for a valid county contractor's license. Is the contractor bonded? Does the price seem fair? Are high-pressure tactics being used? Report the suspicious contractor to authorities to be checked out! If you see unfairly high prices being charged, report it! Local authorities want to help our residents by requiring competence and fairness.

## For more information

For more information, visit the Collier County Emergency Management Website at [www.collierem.org](http://www.collierem.org).



# Generator Use and Safety Precautions



When the power goes off, many residents turn to emergency generators to power refrigerators, freezers, lights, fans and other appliances. If you use a generator, extreme caution is required. While convenient and useful, generators can create hazards for homeowners and electric utility workers. Always read and follow the manufacturer's safety and operating instructions.

Carbon Monoxide (CO) is a color-less, odorless and tasteless poison gas. It is a component of the exhaust from the generator engine. The symptoms of exposure are subtle, but deadly. Never run your generator inside your home or garage or in any other enclosed space. Inexpensive CO detectors, similar to smoke alarms, are readily available and recommended as an added safety precaution.

To avoid Carbon Monoxide poisoning, never use a generator indoors or in attached garages. Only operate the generator outdoors in a well-ventilated, dry area away from air intakes to the home.

To avoid electrocution, plug individual appliances into the generator using heavy duty, outdoor rated cords with a wire gauge adequate for the appliance load. Do not operate more appliances and equipment than the output rating of the generator. This will overload and damage the generator and possibly create a fire hazard.

If a generator is connected to the house wiring, the home must have a transfer switch installed by a licensed electrician. A transfer switch connects your house to the generator and disconnects it from the utility power. This prevents back feeding, or energizing circuits outside your home. Back feeding most commonly occurs when a generator is connected directly to the electric panel or circuit in a home. Feeding power back into the utility system during an outage will energize the transformer serving the house and could pose a serious threat to crews working to restore power in the area who may not know they are working with an energized line.

Do not store fuel indoors or try to refuel a generator while it's running. Gasoline (and other flammable liquids) should be stored outside of living areas in properly labeled, non-glass, safety containers. They should not be stored in a garage if a fuel-burning appliance is in the garage. The vapor from gasoline can travel invisibly along the ground and be ignited by pilot lights or electric arcs caused by turning on the lights. Avoid spilling fuel on hot components. Put out all flames or cigarettes when handling gasoline. Always have a fully charged, approved fire extinguisher located near the generator. Never attempt to refuel a portable generator while it is running.

Item	Running Wattage	Starting Wattage	Item	Running Wattage	Starting Wattage
Dishwasher, Hot Dry	1450	1400	Garage Door Opener ½ hp	725	1400
Coffee Maker	1750	0	Hair Dryers	300-1200	0
Electric Fry Pan	1300	0	Lights	As indicated on bulb	
Refrigerator or Freezer	700	2200	Radio	50 to 200	0
Dehumidifier	650	800	Well Pump – 1/3 hp	800	1300
Clothes Dryer Electric	5750	1800	1/2 hp	1400	2100
Toaster 4 slice	1650	0	Sump Pump – 1/3 hp	800	1300
Automatic Washer	1150	2300	1/2 hp	1050	2150
Microwave Oven 625 watts	625	800	Television, Color	300	0
Electric Range 6-inch Element	1500		Vacuum Cleaner	800	0
Iron	1200	0	Air Conditioner 10,000 BTU	1500	2200
Computer	720	720	20,000 BTU	2500	3300
Water Heater	4500	4500	24,000 BTU	3800	4950
Fan 1/8 hp	400	600	32,000 BTU	5000	6500
Fan 1/4 hp	650	1200	40,000 BTU	6000	7800
Fan 1/2 hp	1100	2400			

# Storm Debris Cleanup

## When your County has been included in a Disaster Declaration

Tropical storms and hurricanes can inundate Collier County with tons of debris, including normal household garbage, yard debris, household hazardous and chemical waste, appliances, and construction and demolition debris. Following Hurricane Wilma in November 2005, Collier County cleaned up approximately 937,000 cubic yards of Federal Emergency Management Agency (FEMA)-eligible debris, at a cost of \$24 million. Collecting and properly disposing of storm-related debris is a critical step in community recovery efforts.

As the storm approaches, and in the immediate aftermath, monitor the Collier County Government website ([colliergov.net](http://colliergov.net)), newspapers, and local radio and television channels for information on debris removal. During the first 72-hours after the storm passes, representatives from FEMA, the Solid and Hazardous Waste Management Department, and the Sheriff's Office will be assessing the damage and road conditions to determine when regular solid waste collections can resume, and when the storm-related debris removal can begin.

The collection of storm-related debris is prioritized in the immediate aftermath of a storm. All types of materials will be collected, but not all at once. You can help ensure debris is collected in an efficient, safe, and timely manner by following a few guidelines. **DO NOT MIX ANY MATERIAL TYPES** (see below). Mixed piles will not be eligible for collection.

### FIRST PRIORITY

**Normal Household Garbage** — everyday household trash and perishable items that you would normally place out for collection in your trash cart or dumpster. Place garbage in your regular collection cart, or in heavy duty plastic bags (seal securely), and place at the curb where you normally would on your regular collection day, unless advised otherwise. Place recyclables – newspaper, cardboard, plastics labeled #1 through #7, glass, steel and aluminum bottles and cans – in your yellow-topped recycling collection cart and place the cart in its regular collection location on your usual collection day, unless advised otherwise.

### SECOND PRIORITY

**Yard Debris** (Yard Trash) — vegetative matter including shrubs, palm fronds, tree trimmings, grass clippings, bushes, leaves, twigs or cut up tree branches.

Small quantities should be prepared as for weekly collection – in paper bags; in personal containers no larger than 35-gallons, weighing no more than 50 pounds when filled; or in bundles no longer than four feet, with no branches thicker than four inches in diameter, and weighing less than 50 pounds.

Large quantities of storm-related yard debris should be placed alongside the curb, with trees and branches cut into manageable lengths. Do not pile yard debris near low hanging objects or around mailboxes, water meters, fire hydrants, or other stationery objects. Large quantities of storm-related yard debris will be collected using mechanical equipment that requires room to operate.

Only yard debris generated by the storm event will be collected. Land clearing and landscape improvement activities are not eligible for collection. Debris from these activities requires removal and disposal by the property owner at their expense.

Large quantities of storm-related yard debris will not be collected on private roads or in gated communities unless those private properties are included in a FEMA declaration, or where an immediate threat to public health and safety exists. Do allow for private roads and gated communities to get pre-storm event authority to provide access post-storm without FEMA.

### THIRD PRIORITY

**Construction/Demolition Debris** — materials directly relating to construction, demolition or damage of buildings and contents, such as cement, glass, dry-wall, insulation, concrete block, wood, etc. Disposal rules for C&D materials vary, and FEMA has restrictions on C&D materials put curbside for collection. Residents are encouraged to monitor the Collier County Government website ([colliergov.net](http://colliergov.net)) and the local media for notices specific to the collection of C&D.

**White Goods** – large appliances including refrigerators, ranges, washing machines, clothes dryers, water heaters, freezers, microwave ovens, and air conditioners. Refrigerators, freezers and other appliances **MUST** be emptied of their contents prior to collection. Appliances containing food waste or other rotting wastes will not be collected. Doors must be removed from refrigerators and freezers for safety reasons.

### Other Bulky Items, Electronic Equipment, Tires, and Lead Acid Batteries

Monitor the Collier County Government website ([colliergov.net](http://colliergov.net)) and the local media for the collection schedule for these items.

# Picking Up The Pieces

## WATER PRECAUTIONS

After a natural disaster, damaged water pipes can cause pressure to drop, possibly letting in contaminated ground water. The concern with the water is bacterial contamination. The most common offenders, shigella and salmonella, can cause severe diarrhea. If not treated with antibiotics, these diseases can lead to life threatening dehydration. Here are some answers and tips for coping with water problems.

Disinfect tap water you use for anything, including for your pets. Boil it for at least ten minutes, or use chemicals: eight drops of chlorine bleach (without scent or other additives) or tincture of iodine per gallon. Let the water sit at least 10 minutes before drinking.

If you wash dishes in tap water, rinse them in extra-chlorinated water. Use about 15 drops of chlorine on the dishes to keep them clean until next use.

Showering or bathing in tap water is fine. If you cut yourself shaving, apply a disinfectant such as alcohol or antibiotic cream.

## FOOD SAFETY RULES

Without refrigeration, items such as fresh milk, custards and creamed foods, cream cheese, cheese spread and cottage cheese, hamburger, pork, fish

and poultry spoil rapidly and should be discarded if they have been without cooling for several hours. Don't trust your sense of smell.

Clean out the refrigerator if power has been off for more than two days. Throw away perishables. Wipe the interior with baking soda and water.

Fill your freezer with plastic jugs of water. A full freezer stays cold longer.

Keep the freezer door closed as much as possible. Foods will stay frozen longer.

Meats and solid items stay frozen longer than baked goods.

Refreezing partially thawed food is risky. Generally, if the foods still contain ice crystals, they're OK to re-freeze although their quality may suffer.

Dry ice keeps food frozen for approximately 1 to 4 days.

Without air conditioning, food waste will start to smell rapidly. Use small plastic garbage bags; tie or seal and place in a larger bag or can outdoors.

## MAKESHIFT KITCHEN AND POWER SUBSTITUTES

A garage, carport or roofed patio would be an ideal spot for a temporary kitchen. This is what you'll need:

- A surface to prepare food. A small table or impro-

vised table.

- A large cooler and bags of ice to keep food fresh. Buy only the amount of fresh food your family can consume in one meal. Rely on canned foods for safety's sake.
- Use a charcoal or propane grill or a camp stove for cooking. Do not bring these grills inside; a fire could start or fumes could generate.
- Use kitchen cabinets or sturdy boxes for storage.
- For lighting use fuel-based lanterns or candles.

## CLOTHING AND FURNITURE PRESERVATION

- Take down wet draperies and spread to dry.
- Take furniture outside to dry, but don't put in the sun. Put under a covered patio or tarp.
- Elevate wet upholstered furniture if it is resting on carpet.
- Hang comforters and blankets out to dry.
- Dry pillows outdoors, but not in direct sunlight.

## 10 Questions to Ask if Your Family Member Resides in an Assisted Living Facility, or Nursing Home

1. Does the facility have a currently approved Comprehensive Emergency Management Plan? If yes, may I see a copy of the approval letter? If no, ask them why, as it is required.
2. Do you maintain a minimum 72-hour supply of food, water, medications, etc. for each resident?
3. Do you have an emergency generator? If yes, to what does it supply power during a blackout?
4. Under what circumstances would my family member be evacuated?
5. Can my family member be released to me for the purpose of evacuation?
6. Who will notify me of the impending evacuation of my family member?
7. Whom should I call to receive current information on my family member?
8. What facilities might my family member be evacuated to? Where are they located?
9. Who will notify me that my family member is returning to this facility?
10. If my family member evacuates with me, who do I contact to determine when the facility is open and operating?



# Roof Repair Tips

## While waiting for licensed

Contractors, there are two temporary remedies for leaks you can use. Before climbing onto the roof of your home, know this: It is easy to slip, particularly on wet tile and there is danger from tree branches, power lines and ladders.

Repairs are made from the outside. On the inside, set up buckets under leaky areas to relieve the water pressure. On the outside of the roof, you can use plastic sheeting or tar paper. The smallest holes may be patched by using a trowel to spread roofing cement over them.

## Plastic Sheeting

This is the most temporary measure. Take heavy plastic sheets — a brand name is Visqueen — and use roofing nails to fasten them around the hole. If you can find 2 X 4's, square off the hole with the wood first. Then wrap the plastic around the wood and nail down the wood.

If you can't get wood or nails, use bricks, cement blocks or sandbags to hold down the plastic.

## Roofing Paper

This is known as tar paper or roofing felt. Find it in the building materials sections of stores. It is applied with trowel-grade roofing cement and a trowel. The paper generally is sold in rolls by weight (15, 30 and 90 weight paper are common) per 100 square feet.

The paper is best applied in overlapping layers — alternating the cement and paper — from the bottom of the roof upward.

## Contractor Tips

The National Roofing Contractors Association can help you find reputable roofing contractors. The Web site is [www.nrca.net](http://www.nrca.net).

The NRCA offers these tips:

Check for a permanent place of business, telephone number, tax identification number and occupational license. A professional will have these readily available.



Check for a company with a good track record. Ask the contractor for proof of insurance. Insist on seeing copies of both liability coverage and workers' compensation certificates.

Find out if the contractor is bonded and licensed.

Be sure the contractor can provide a manufacturer's warranty. Beware of unrealistic, long-term warranties.

Ask for a list of references and completed projects. Check with past customers to see if they were satisfied with the materials and workmanship.

Call the Department of Business and Professional Regulation to check for complaints against a contractor. The DPR can be reached at (850) 487-1395.

Insist on a written proposal and examine it carefully before signing or paying any money.

## Spotting Roof Problems

Resist the urge to get up on a ladder to take a closer look at your damaged roof. Leave that to a professional. Here's some inspection advice.

## From the Ground

If you need a closer look, use binoculars. Look for torn or missing shingles and problems in the valleys where two sloping sections join at an angle. Because water flows heavily in the valleys, they are especially vulnerable.

## A Closer Look

If you can't see from a distance, wear non-slip, rubber soled shoes and use a firmly braced or tied-off ladder equipped with rubber safety feet.

## Don't Walk on the Roof

You could dislodge the protective surface granules, diminishing waterproofing effectiveness. You also could fall off or through a weak, damaged roof. If you find large accumulations of shingle surface granules in the gutters, it doesn't necessarily mean the roof needs to be replaced. A contractor should inspect the roof, however.

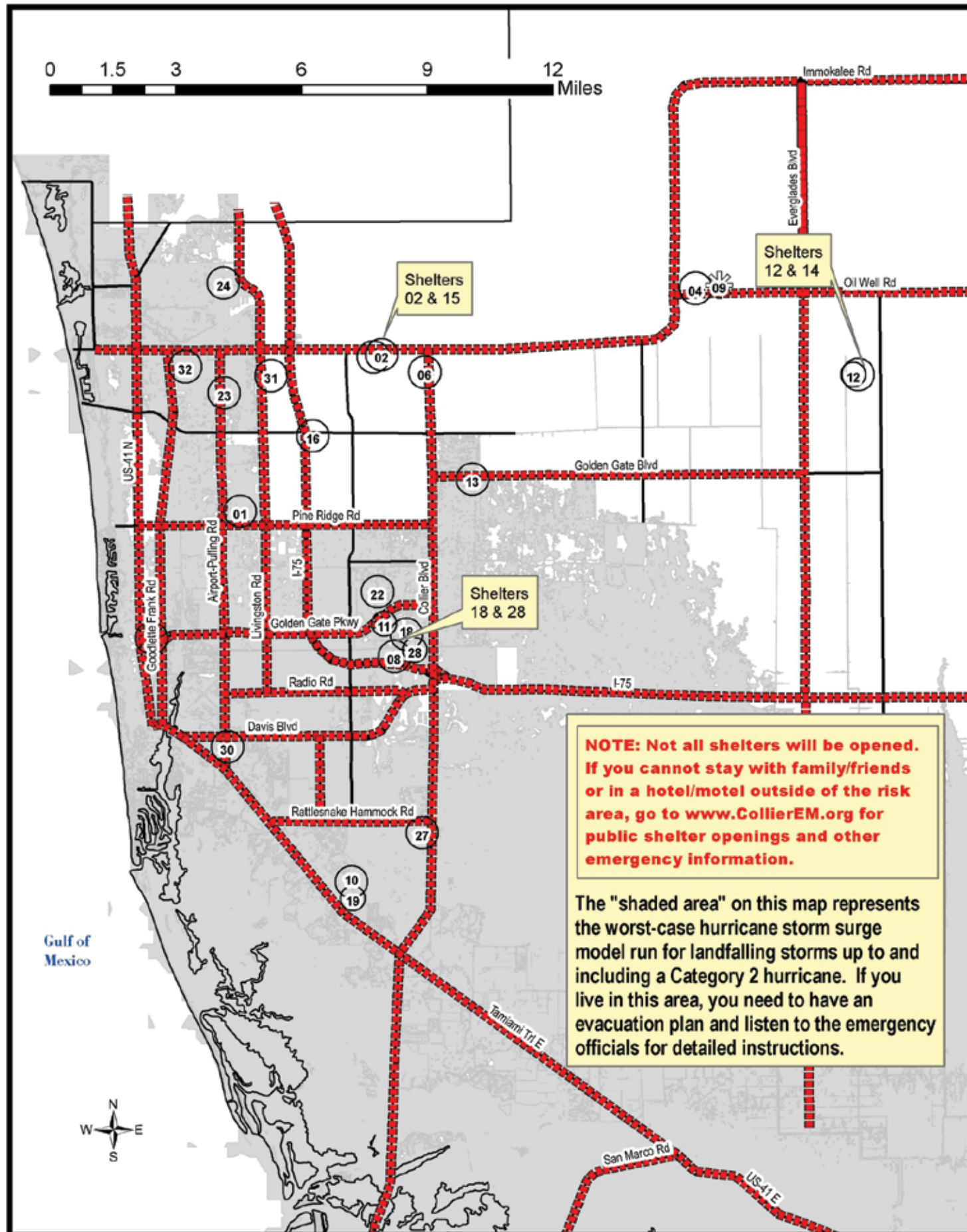
Tile roofs should be checked for cracked, missing or loose pieces of roofing material. For asphalt or wood-shingle roofs, look for protruding nails. On flat roofs, look for bare spots in the gravel surface and check for standing water.

Take a close look at the flashing on chimneys, vents, skylights, wall/roof junctions and other areas where the integrity of the roof may be compromised.

Check television antennas and other add-ons to see if there are leaks that are a result of improper sealing of openings made in the roof.

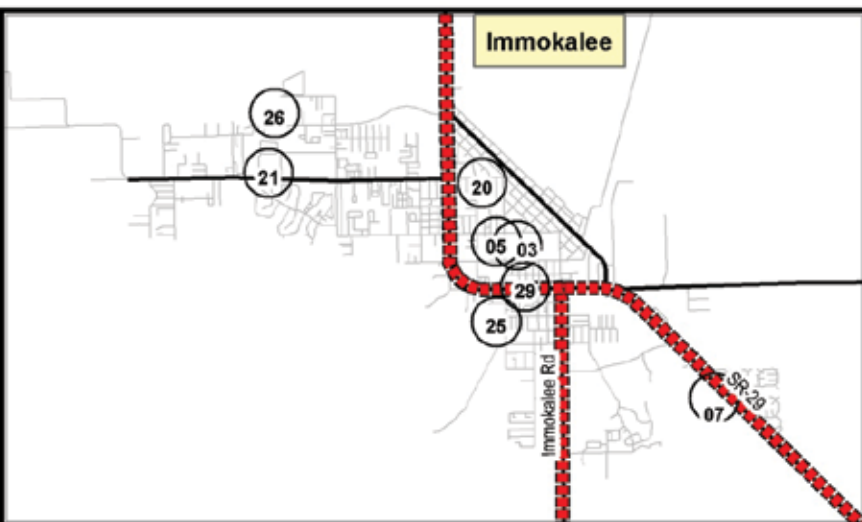


# Collier County Storm Surge Vulnerability and Shelter







































# er Map



## EVACUATION AREAS

When a storm threatens, evacuation areas will be defined by known landmarks, e.g., roads or communities. Please monitor your local media for up-to-date information. If you have the internet available, go to: <http://www.CollierEM.org>

## COMMUNITY SHELTERS

-  09, Palmetto Ridge HS Spec Needs
  -  01, Barron Collier HS
  -  02, Gulf Coast HS
  -  03, Immokalee HS
  -  04, Corkscrew MS
  -  05, Immokalee MS
  -  06, Oakridge MS
  -  07, Village Oak ES
  -  08, Golden Gate HS
  -  10, Lely HS
  -  11, Golden Gate MS
  -  12, Sabal Palm ES
  -  13, Big Cypress ES
  -  14, Cypress Palm MS
  -  15, Laurel Oak ES
  -  16, Vineyards ES
  -  17, Naples HS
  -  18, Golden Terrace Interm.
  -  19, Parkside ES
  -  20, Highlands ES
  -  21, Lake Trafford ES
  -  22, Golden Gate Interm.
  -  23, Pelican Marsh ES
  -  24, N. Naples MS
  -  25, Pinecrest ES
  -  26, Eden Park ES
  -  27, Lely Elem
  -  28, Mike Davis ES
  -  29, Immokalee Friendship Hse
  -  30, St. Matthews House
  -  31, N. Collier Reg. Park
  -  32, Veterans Cmty Park
-  Evacuation Routes
-  Storm Surge Vulnerability

## Evacuation & Shelter Information

For hazardous weather conditions, people residing in low lying areas and in mobile home parks should consider seeking safe shelter when conditions warrant.

When an evacuation is ordered and you are in the affected area requiring transportation to a shelter, the Collier Area Transit (CAT) mass transportation service will pick up evacuees along their normal routes and stops.

When a disaster threatens, our Collier Information Center phone bank will be opened to answer your questions. Call 3-1-1 or 252-8444.

**PET SHELTER:** For pet shelter information call Collier's Domestic Animal Svcs. @ 252-7387.



# How well will your home withstand hurricane force winds?

## Storm Ready Assessment

### When was your home built? (Circle One)

- Prior to 1980 ..... 0
- 1980-1994..... 4
- 1995-2002..... 6
- 2003 or newer ..... 10

### Where is your home or business located?

- On a barrier island..... 1
- Less than 5 miles from the coast ..... 2
- Between 5 & 20 miles from the coast ..... 3
- More than 20 miles from the coast ..... 4

### Select number of stories:

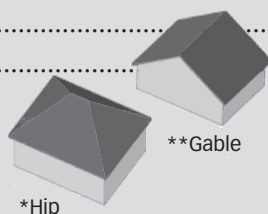
- One story ..... 4
- Two or more stories ..... 2

### Select roof deck type:

- Plywood/OSB..... 3
- Dimensional Lumber..... 2
- Concrete..... 4

### Select roof shape:

- Hip\* ..... 6
- Gable\*\* ..... 1
- Other..... 3



### Type of Roof-Wall Connection: (Circle One)

- Single/Double Wraps..... 6
- Slips..... 4
- Toe Nails ..... 2
- Unknown ..... 1

### Type of Roof Cover:

- Metal Panel..... 3
- Shingle ..... 2
- Tile..... 4
- Unknown ..... 1

### Is your structure CBS or wood frame?

- CBS/Concrete ..... 10
- Wood Frame..... 5
- Combination of above ..... 8

### Openings currently protected:

- Some openings ..... 10
- All openings..... 20
- No openings ..... 0

### Type of opening protection:

- Hurricane (meets Florida building code)..... 30
- Ordinary ( does NOT meet Florida building code)..... 20
- None ..... 0

### Is your structure mobile or conventional?

- Mobile..... 1
- Conventional..... 2

### Explanation of Score Results:

#### Above 85:

Means you have done well to protect your home and family from the threat of hurricane force winds

#### Between 75 and 85++ :

There is an opportunity to improve the chances of your home surviving hurricane force winds

#### Between 60 and 75++ :

Indicates you need to take action to protect your home from high winds and flying debris

#### Less than 60++ :

Suggests the envelope of your home is vulnerable and might fail to withstand hurricane force winds.

Add up all of the circled values above and record the total score in the space provided below.

**Total Score:** \_\_\_\_\_

++ If you would like more information on building codes or types of hurricane protection products, call **Storm Smart** at 1 (888) 962-7283 or visit: [www.stormsmart.com](http://www.stormsmart.com).

# Important Information for Manufactured and Mobile Home Residents

**Safety is the most important part of storm preparedness. Please remember that no matter how good your tie-downs are or how complete your insurance coverage is, EVACUATION is the best plan to save your life!**

## Before the Storm, Secure Your Home

**Anchors REQUIRED:** Mobile homes should ALWAYS be tied down. In fact, Florida law requires manufactured home owners to secure their homes using anchors and tie-downs.

Homes without proper tie-downs are more vulnerable to high winds. Taking proper precautions now will ensure that your mobile home is properly secured, reducing possible damage to your home and your neighbor's property. Tie-downs should be checked at least once per year.

## Windstorm Insurance:

Florida law PROHIBITS the sale of windstorm insurance on manufactured homes not anchored in accordance with Florida law.

Remember: Damage caused by flooding is NOT covered by most homeowner's policies. You may need flood insurance even if you do not live in a flood zone. The National Flood Insurance Program makes flood insurance available for manufactured homes on foundations. See your insurance broker for details.

## Contractor's License:

Florida law requires tie-down installers to be licensed by the State. To verify a contractor's license, call the Department of Highway Safety & Motor Vehicles, Manufactured Housing Section of Division of Motorist Services.

**Inspections:** Have your tie-downs inspected by an installer. Most installers will inspect your home and provide a free estimate. Get estimates from three installers and ask them to explain the installation.

## Installation Rules:

Tie-down installation requirements are set forth in Florida Administrative Code 15C-1. Ask your installer about the requirements of that Code. For detailed information contact the Department of Highway Safety and Motor Vehicles, Bureau of Mobile Home and Recreational Vehicle Construction at (850) 617-3004.

## Time & Cost:

A typical tie-down installation costs less than \$2,000 and takes less than a day.

## Alternative Anchoring Systems:

When a contractor inspects for tie-downs, ask if there are dependable, State approved anchoring systems available for your home.

## Other structures:

Also ask about recommended methods to secure storage/utility sheds, carports, and other vulnerable structures.

## Group Estimates:

Most contractors provide discounts for group installations. Meet with your neighbors to plan a group inspection and/or installation.

## Utilities:

Learn how and when to turn off gas, water, & electricity.

## Safety Tips

- Check for loose straps.
- Make sure straps are properly aligned and not on an angle.
- Check to be sure the proper number of tie-downs have been installed.
- Verify that ground anchors and stabilizer plates have been installed properly.
- Be sure support piers are in contact with the frame.
- Replace straps or ground anchors that show signs of corrosion or damage.

For additional protection, you may want to consider installing a longitudinal tie-down system located at the front and rear of your home.

## Develop an Evacuation Plan

### Host Homes:

Emergency management agencies recommend you arrange a "Host Home" outside the evacuation zone. A Host Home is the home of a friend or family member who has agreed to provide temporary shelter for you and your family.

### Communication Plan:

Ask an out-of-state relative or friend to serve as the "family contact." Make sure everyone in the family knows the name, address, and phone number of the contact person.

### Public Shelters:

Public Emergency Shelters should be your LAST RESORT in an evacuation. You will have no privacy, limited space, and meal service may be delayed. Your temporary "home" will be a gymnasium floor or public hallway, and local officials must give you permission to leave! If you MUST use a public shelter, identify two shelters nearby. Listen to the radio or TV and go to the closest shelter that is open. Not all shelters open each storm.

### Evacuation Routes:

See the enclosed map for evacuation routes. Be prepared to drive 20 to 50 miles to reach a safe place.



# Insurance

Most property owners have Homeowners Insurance coverage insuring them from catastrophic loss. However a Homeowners policy does not protect you from loss in flooding or rising water.

To insure your home from Flood (rising water) you must have a separate Flood Insurance policy. Our county qualifies and participates in the National Flood Insurance Program. We qualify by making building requirements stringent and in accordance with the Florida Building Code and local flood damage prevention ordinances.

If you don't have a Flood Insurance policy, check with your insurance agent for a price quote on your home and your personal property. Don't wait until the hurricane warning has been issued. There is a 30-day waiting period before flood insurance becomes effective, unless you are purchasing a new home with a mortgage. Additional information can be obtained from your county Emergency Management office.

## BEFORE THE STORM

### Make Sure That You Know Your Coverage

You may have made some improvements that have increased the value of your home. Make sure that you review your insurance policy carefully with your agent and know your coverage limits as well as your deductibles. Consider changing your coverage, if it is not adequate.

### Check your policy for Flood and Windstorm Coverage

Remember a homeowner's policy does not cover flood damage caused by rising water. If you live in a flood prone, or designated flood zone area, you should talk to your representative to obtain flood insurance.

Homeowners policies usually cover windstorm damage caused directly from the wind, wind driven water or hail policy. If you have any questions about whether your policy covers windstorm damage, contact your insurance agent or your insurance company. Your Agent or your insurance company can assist you in making changes and determining what the cost of those changes would be.

### Know What Your Current Policy Does and Does Not Cover

Standard homeowner policies usually limit coverage on items such as valuable jewelry, art, antiques, and money. You may need additional coverage for these items.

If you have an older home, you will need coverage for "Law and Ordinance". This will cover all of the

code changes that may have occurred since your home was built.

Most homeowners' policies do not cover backup of septic tanks, wells or sewers into your home unless you have added a "rider" to your policy covering this type of loss.

### Update Your List of Personal Belongings

Make an itemized list of your personal property, their cost, dates of purchase, and serial numbers, if appropriate. Your insurance company will probably require proof of the cost of any item for which a claim is made. Photographs and/or videotapes are also good ideas that you may wish to consider. Keeping this list updated yearly and as you add items is extremely important.

### Safeguard Your Records

Keep a copy of your important papers, such as insurance policies, mortgages, title, auto and health, insurances and inventory records, in a convenient place. Make a list of phone numbers of people and companies that you will need to talk to if you have damage. If your property is damaged, it will be to your advantage to have access to this information or if you have to evacuate you will need to be able to take this information with you when you go.

## AFTER THE STORM

### Report Damage to Your Insurance Agent or Insurance Company Immediately

Your agent or company will need to provide you with a claim number. You will need to keep this number and have it available in case you need to contact your company again. Also make sure that if your company is setting up a "Claims Phone Number" that you keep that as well. You will next be contacted by an adjuster representing the company that will want to come and inspect your damage. Make sure that you have taken pictures of your damage before you have made any temporary repairs. Keep these pictures as a record just in case you have to mediate your damages with the insurance company.

### Make and Document Emergency Repairs

Your policy probably requires that you make emergency repairs to prevent further damage to your home or contents. Keep all receipts and take photographs of the damage before and after emergency repairs. Your adjuster will advise you as to how to handle reimbursement for the temporary repairs. Make copies of anything that is given to the adjuster



or sent to the insurance company.

### Take Precautions if the Damages Require You to Leave Your Home

Secure your property. Remove valuable items. Lock windows and doors. Contact your insurance agent and leave a phone number where you can be reached. These same precautions should be taken if you are required to evacuate before a storm. If you cannot live in your home after the storm, your insurance company will be able to pay you for "Additional Living Expenses" if you qualify. Make sure that you keep all of your receipts as you will need them to get reimbursed from the insurance company.

### Looting

Looting has occurred in many communities after a hurricane. Criminals may take advantage of the opportunity to enter evacuated homes and businesses. Local law enforcement agencies and, if necessary, the National Guard will do everything possible to minimize looting. Place jewelry and valuables in a sealed freezer bag in your safe deposit box or take them with you when you evacuate.

The Department of Financial Services (DFS) recommends every home owner should have an insurance check up with their agent before hurricane season starts. Do I need flood insurance, check on windstorm coverage, do I need more coverage, and what does my policy cover and exclude?

If you rent, DFS recommends that you purchase Renters Insurance to cover your contents in the home or apartment.

There are free consumer guides, including homeowner's insurance information available on our website under the listing of Consumer Help. You will also find an Insurance Library available to answer your questions. Do not forget to download your Homeowner's Financial Tool Kit from [www.myflorida.com](http://www.myflorida.com); it will help you make informed decisions when it comes to disasters.



# Thunderstorms & Lightning

It doesn't have to be raining for lightning to strike. Almost all lightning will occur within 10 miles of its parent thunderstorm, but it CAN strike much farther than that. Lightning detection equipment has confirmed bolts striking almost 50 miles away, but these are very rare.

Thunderstorms can produce several types of hazardous weather including large hail, damaging winds, flash floods, and tornadoes. However, lightning is the number one cause of weather related fatalities in Florida averaging 10 fatalities and 40 injuries a year.

Approximately half of the deaths and injuries occur during outdoor recreational activities, about 40% of those occur on the water.

## Where to Go

The safest location during a thunderstorm is inside a large enclosed structure with plumbing and electrical wiring. These include shopping centers, schools, office buildings, and private residences. If lightning strikes the building, the plumbing and wiring will conduct the electricity more efficiently than a human body. If no buildings are available, then an enclosed metal vehicle such as an automobile, van, or school bus makes a decent alternative.

## Where NOT to Go

Not all types of buildings or vehicles are safe during thunderstorms. Buildings are NOT SAFE (even if they are "grounded") if they have exposed openings. These include beach shacks, metal sheds, picnic shelters/pavilions, carports, and baseball dugouts. Porches are dangerous as well.

Convertible vehicles offer no safety from lightning, even if the top is "up". Other vehicles which are NOT SAFE during lightning storms are those which have open cabs, such as golf carts, tractors, and construction equipment.

Remember, it is not the rubber tires of a vehicle that protect you from lightning. The metal shell of a vehicle gives the electricity from the lightning a path to flow around you.

## What to Do

Once inside a sturdy building, stay away from electrical appliances and plumbing fixtures. You may want to unplug valuable electrical equipment so they will not be damaged. As an added safety measure, go to an interior room. If you are inside a



vehicle, roll the windows up, and avoid contact with any conducting paths leading to the outside of the vehicle such as radios, CB's, and the ignition or you could be badly burned if lightning strikes.

## What NOT to Do

Lightning can travel great distances through power lines, especially in rural areas.

Do not use electrical appliances, including corded



telephones and desktop computers, unless it is an emergency. Cordless phones, cell phones, laptop and tablet computers are safe to use.

Stay away from the windows and do not take a shower or use the bathtub.

## What should I do if I am in a boat on the open water during a thunderstorm?

Thunderstorms over the coastal waters in Florida are generally unpredictable. Even with the best weather reports, boaters can still be caught in open waters when a thunderstorm develops. With or without a lightning protection system, it is critical to take additional precautions to protect yourself.

Stay in the center of the cabin, if so designed. If there is no cabin, stay low in the boat. Don't be a stand-up lightning rod!

Keep arms and legs in the boat. Don't dangle them over the side.

Stop fishing, water skiing, scuba diving, swimming or other water activities when there is lightning or even when weather conditions look threatening. Lightning can strike well ahead of a storm.

Disconnect and do not use or touch the major electronic equipment, including the radio, throughout the duration of the storm.

Lower, remove or tie down the radio antenna and other protruding lightning protection system.

To the degree possible, avoid making contact with two components connected to the system at the same time. For example, the gear levers and the spotlight may both be connected to the system. If you have a hand on both when lightning strikes, the path of the electric current could be directly through your heart—a very deadly path!

At least one person on board should be competent in CPR and First Aid. Many individuals struck by lightning can be saved with prompt First Aid.

# Heat Emergencies

Heat emergencies are of three types: heat cramps (caused by loss of salt), heat exhaustion (caused by dehydration) and heat stroke (shock).

Remove the victim from the heat and have him lie down. Apply cool compresses, elevate the feet, drink fluids and use a fan to blow cool air. Get medical help if needed.

Heat emergencies are easily preventable by taking precautions in hot weather. If the problem isn't addressed, heat cramps (caused by loss of salt from heavy sweating) can lead to heat exhaustion (caused by dehydration), which can progress to heatstroke.

Heatstroke, the most serious of the three, can cause shock, brain damage, organ failure, and even death.

The early symptoms of a heat emergency include: Profuse sweating, fatigue, thirst, and muscle cramps.

Later symptoms of heat exhaustion include: headache, dizziness and lightheadedness, weakness, nausea and vomiting, cool moist skin, and dark urine.

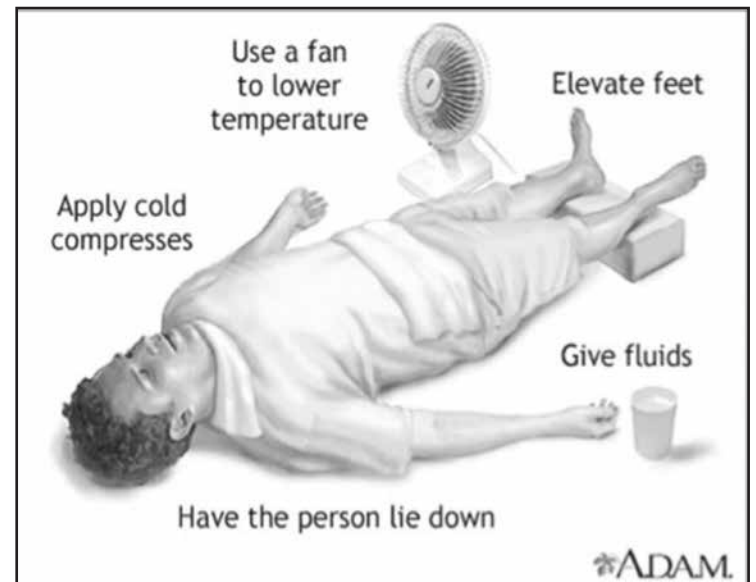
The symptoms of heatstroke include: fever, irrational behavior, confusion, dry, hot and red skin, rapid shallow breathing and pulse, seizures, and unconsciousness

## Call 911 if:

- The person loses consciousness at anytime.
- There is any other change in the person's alertness (for example, confusion or seizures).
- Fever (temp above 104°F)
- The person shows signs of shock (bluish lips and finger-nails and decreased alertness).
- Other symptoms of heat stroke are present (like rapid pulse or rapid breathing).
- The person's condition does not improve, or worsens despite treatment.

## Prevention

- Wear loose-fitting, lightweight clothing in hot weather
- Rest frequently and seek shade when possible.
- Avoid exercise or strenuous physical activity outside during hot or humid weather.



- Drink plenty of fluids every day. Drink more fluids before, during, and after physical activity.
- Be especially careful to avoid overheating if you are taking drugs that impair heat regulation, or if you are overweight or elderly.

# Dealing with Traumatic Events

## Plan Ahead

Whatever the crisis, some planning before the disaster can usually help family members react wisely. Families that work together to prepare for the problem will cope better than those who do not. Consider how your children might react in a disaster.

What would your own reactions be? The crisis can affect each person's emotional and physical well being. Plan in advance how to deal with the situation. Follow the advice in this booklet. Discuss and practice plans with family members before a disaster strikes. Work together to help everyone understand the procedures.

## Venting Feelings

**Listening:** In times of trouble and crisis, many people need someone who will just listen. Talking about the experience helps the burden seem a little lighter and easier to bear. If you are feeling "blue" or "down," you may want to contact a friend or neighbor, a family member, your pastor or rabbi,

or someone else you feel you can really talk to as a friend.

If you find yourself called upon to listen to a friend or neighbor who just wants to talk, please listen. Some people will feel very much alone and afraid; others will blame themselves and wonder, "Why Me?" They are not really looking for an answer to that question, but rather are saying, "How can I endure this?" "How can I go on?" Solutions, answers, and advice aren't necessary. Just listen and let the troubled person talk.

## Providing Support

Sometimes people, who are very upset or frightened, later are embarrassed about expressing those feelings. They may feel "weak," or that they have "dumped" on you. Reassure your friend by saying that his/her feelings are normal and perfectly understandable. Be sure that your friend knows you are available to listen again, if he or she needs to talk. Help her/him to look toward the future, when

things will be better.

If you are concerned that someone is very depressed and you do not feel you are able to help, be sure he/she does get help from a trained professional. Suggest a counselor, member of the religious community, social worker, or support group to help your friend through this period.

## Coping With Children's Emotions

Remember that children mirror their parent's anxieties. Be calm to reduce your children's fears.

Take something familiar such as a favorite toy or book into a new situation. This helps a child feel more secure.

In a crisis situation a child may demonstrate unusually childish behavior. This is normal for a child who is frightened and who doesn't understand a situation as serious as a hurricane.

Most children are not capable of understanding the magnitude and severity of a crisis situation. Be understanding and patient.

# Cold Weather Recommendations

Although Southwest Florida basks in a subtropical climate most of the year, occasional arctic cold fronts can invade the area causing frosts and/or freezes. Damage to vegetable and citrus crops is the most common result. Contact County Extension Services for further information.

- Dress in layered clothing and wear some kind of head cover.
- Keep pets inside. Make sure they are out of the wind and within some type of cover. When

necessary walk them on the grass (not the cold sidewalk).

- Protect livestock and other animals with adequate shelter. Provide plenty of water and ensure that it does not freeze, and provide extra feed and supplemental heat.
- Bring potted plants inside.
- Cover outdoor plants with burlap or cloth. Cold will penetrate plastic.

- Check space heaters for sufficient ventilation.
- Do not refuel kerosene heaters inside.
- Make sure fireplace flues are working properly.
- Check extension cords for breaks and/or fraying.
- Do not use charcoal or gas grills indoors. They produce deadly carbon monoxide fumes!

# Seasonal Influenza and Pandemic Influenza

The Florida Department of Health (FDOH) – Collier County has partnered with Collier County Emergency Management and the Florida Southern Gulf Region of the American Red Cross to develop community programs to assist faith based organizations, businesses, and our residential communities with their preparedness efforts. We offer various disaster preparedness trainings such as Influenza Awareness, as well as assistance with Continuity of Operations Planning. Your local health department also has our informative FDOH – Collier County website <http://collier.floridahealth.gov> with an area dedicated to preparedness issues. Our goal is to foster a community that is aware, educated, organized and trained to meet the challenges during a natural or man made disaster.

Flu refers to illness caused by a number of different influenza viruses. Flu can cause a range of symptoms and effects, from mild to lethal. Flu symptoms may include fever, coughing, sore throat, runny or stuffy nose, headaches, body aches, chills and fatigue. Most healthy people recover from the flu without problems, but certain people are at high risk for serious complications. Those that are more at risk include children, individuals 65 years of age or older, pregnant women, people with an underlying chronic disease, or those with immuno-suppression. Annual outbreaks of seasonal flu usually occur during the late fall through early spring. In a typical year, approximately five to twenty percent of the population will get the flu.

A flu pandemic occurs when a new influenza A virus emerges for which there is little to no immunity in the human population; the virus causes serious illness and spreads easily from person-to-person worldwide. Multiple waves of community outbreaks of illness could occur with each wave lasting two to three months. During a pandemic,

there will not be a vaccine immediately available; therefore, community strategies that delay or reduce the spread of the disease are critical. Non – pharmaceutical interventions are as simple as frequent hand washing, cough / sneeze etiquette, staying home when ill, not sharing food / beverages / utensils, and frequent disinfection of commonly used areas.

In an influenza pandemic, our community as a whole plays a key role in protecting everyone's health and safety, as well as limiting the negative impact on the economy and society. As with any catastrophe, having a contingency plan is critical. This information has been developed to assist our community with planning efforts associated with the health and well being of every citizen and continuing our daily activities during a flu pandemic.



## Plan for the Impact of Seasonal and Pandemic Influenza

- Find accurate seasonal / pandemic influenza information from community public health agency web sites such as <http://www.collierprepares.org>, or [www.flu.gov](http://www.flu.gov). Disseminate these educational materials covering seasonal / pandemic influenza fundamentals including signs and symptoms of flu, personal / family / community protection and response strategies. During flu season, education is protection.
- Encourage family, friends, and neighbors to get their yearly influenza vaccination. The Centers for Disease Control (CDC) state the flu vaccine is the best protection against the flu.



# Tornadoes



## What Is A Tornado?

A Tornado is a violent storm with whirling winds of up to 300 miles per hour. It appears as a funnel shaped cloud, from gray to black in color, which extends to the ground from the base of the thunderstorm.

A tornado spins like a top and may sound like the roaring of an airplane or locomotive. In Florida, summer tornadoes generally move at speeds less than 20 MPH and can move in any direction. Winter tornadoes tend to move at speeds less than 40 MPH and generally move from the southwest to northeast. Their direction of travel can be erratic and may change suddenly. These short-lived storms are the most violent of all atmospheric phenomena and the most destructive, over a small area.

## When Can A Tornado Occur?

Most tornadoes in Florida are likely to occur between 3 PM to 8 PM during the months of June, July, and August; however, they can occur at any time, often with little or no warning. Fewer tornadoes occur in the winter and spring. Most tornadoes in Florida are considered weak with winds of 50 to 100 MPH. However, if a tornado occurs

in the colder part of the year it tends to be stronger than those in the summer. In 2006 a strong summer tornado with wind speeds over 110 MPH occurred in Port Charlotte and injured 3 people and causing \$500K in property damage. On September 16th, 2007 a pair of tornadoes caused around \$4M in damages to Cape Coral and Fort Myers Beach, with minor injuries. Tornadoes, that form over the Gulf, are called waterspouts.

Tornadoes often form in the front right of hurricanes that move in from the Gulf of Mexico.

## Tornado Watch or Tornado Warning?

The National Weather Service broadcasts severe weather conditions over the emergency alerting system as well as NOAA Weather Radio (see page 28 for the NOAA weather station in your area).

When they post a tornado watch they want the public to know that conditions are right for a tornado. When a tornado warning is posted for a given area, a tornado has been sighted or has been detected on radar. The warning will include those cities in the path of the storm. In general, a watch means, “Caution, Watch the Sky” and a warning means “Danger, Take Cover.”

# What protective actions should I take for Tornadoes?

## For Tornado Watches:

When conditions are right for a tornado, there are a few things, listed below, you should do:

1. Stay tuned to a local weather station or listen to your NOAA Weather Radio (page 28).
2. Secure any loose objects outdoors, or move them inside.
3. Survey local structures for the most suitable shelter.
4. Keep watching the sky to the south and southwest. If you see any funnel shaped clouds, report them immediately to the nearest law enforcement agency and take cover.

## For Tornado Warnings:

This means a tornado has been spotted near your area or is predicted to come your way. **TAKE SHELTER IMMEDIATELY!!** Do not leave shelter until you are sure no further danger exists. Remember, there is no guaranteed safe place during

a tornado. Here are some examples of places you may be in:

1. In a Motor Vehicle: The least desirable place to be during a tornado is in a motor vehicle. Never try to outrun a tornado in your car. Stop your vehicle and get out. Seek shelter elsewhere. Do not get under or next to your vehicle. A ditch or ground depression will help, if a tornado shelter is not nearby.
2. At School: Follow the school disaster plan. Stay away from auditoriums, gymnasiums, and other areas with wide, free-span roofs. Go into center hallways and stay away from windows.
3. Open Country: Move away from the tornado's projected path at right angles. Seek shelter in a ditch, ravine, or culvert. Even a low spot in the ground will give you some protection. Stay away from trees and remember to protect your head.
4. In a Home or Condo: The best place to go is the innermost hallway on the lowest floor. An interior closet is relatively safe. An interior bathroom is

even better. The walls are close together and the bathtub, sink, and toilet help support debris in case the house collapses. **AVOID WINDOWS**, since flying debris does most of the killing. The worst kind of flying debris is broken glass. **DO NOT** open any windows to equalize pressure when a tornado approaches. If a tornado actually gets close enough for the pressure drop to be experienced, the strong winds have probably already caused the most significant damage. Opening windows, in fact, may actually increase damage.

5. In a Mobile or Manufactured Home: These homes are easy to damage by flying debris and are one of the least desirable places to be during a tornado. If a tornado approaches, seek other shelter immediately. Go to a tornado shelter on foot, if possible. Do not drive your car. Do not get under your mobile home. If no other shelter is available, lie down in a ditch or a ground depression.



# Wildfires

Wildfires occur outside the front and back doors of many homes in our area. The Florida Forest Service's Caloosahatchee Forestry Center, City of Naples Police & Fire Department, Immokalee Fire Control District, Isle of Capri Fire & Rescue District, Greater Naples Fire Rescue District, Marco Island Fire & Rescue Department, Ochopee Fire Control District, and North Collier Fire Control & Rescue District would like to provide the residents of our communities with some tools to better prepare for wildfire season. In fact, 70% of wildfires are caused by people. The other 30% are caused by lightning. Florida's wildfire season is year-round, with peak fire activity in Southwest Florida during the months of January-June.

Wildfires in Florida's natural areas are a vital component to the health and wellbeing of our native plants and animals. There are plants and animals that cannot survive without periodic fire. Occasional wildfires ensure continued diversity of wildlife and native vegetation, such as maintaining habitats for gopher tortoises while making room for Florida wildflowers to bloom. Wildfires and prescribed fire can also thin out dense woods and provide ash that fertilizes the soil. Fire has been a part of Florida's ecosystem for thousands of years.

Our districts have a considerable number of homes situated within close proximity to wooded areas, natural spaces, and preserves. When woods are near homes this is known as the wildland-urban interface (WUI). WUI is a linear distance measured between unoccupied land (wooded/natural areas) and developed areas (residential, commercial). Essentially, if there are trees, brush, or long grasses located just steps outside of a home, that home's fire ignition level is much greater than if there were at least 30 feet of separation.

## Land Management to Reduce Fire Risk

To help ensure the health of our wildlands and wooded areas, Caloosahatchee Forestry Center conducts prescribed burns, and employs wildfire

mitigation tactics that utilizes roller chopping, mulching, or mowing in designated high fire risk areas.

Prescribed fire is quick, efficient, and best simulates the natural role of fire in Florida. Burning often requires months of planning to ensure control and safety along with heavy equipment and trucks on scene. Fire personnel take extra precautions to limit problems caused by smoke from these fires.

Roller chopping is a technique that uses a bulldozer to pull a metal drum with blades that knocks down and cuts up plants and vegetation. Forestry personnel work carefully around trees to limit damage to root systems, and the work is essential in areas where vegetation has grown to dangerous heights and/or prescribed burns are impractical.

Mulching and grinding uses machines with toothed, rotating drums that masticate vegetation. The machines create a layer of mulch that will slowly decompose. The process allows fire personnel to work closer to homes, and these areas quickly grow back.

Wildfire safety is everyone's responsibility. The Caloosahatchee Forestry Center, City of Naples Police & Fire Department, Immokalee Fire Control District, Isle of Capri Fire & Rescue District, Greater Naples Fire Rescue District, Marco Island Fire & Rescue Department, Ochopee Fire Control District, and North Collier Fire Control & Rescue District, recommends people take action to reduce the risk to homes and other structures in the WUI. Florida residents often choose to live in areas prone to wildfires because of the natural beauty of the areas. Fast moving wildfires present significant danger, and have increased dramatically as people build in heavily wooded areas. The only solution is to take appropriate steps to make homes more Firewise. The Firewise principles that follow, list the bare minimum that needs to be done to reduce the risk of wildfires causing harm to people and structures in the WUI.

## Firewise Tips to Make Your Home Safer From Wildfire

(Note: Caloosahatchee Forestry Center will provide a free wildfire inspection of your home upon request.)

- Keep tree branches trimmed away from roofs and gutters. Keep gutters free of leaves.
- Structures should have an area of at least 30 feet of defensible space around them that is clean, green and free of dead vegetation (if less, do as much as possible).
- Remove dead vegetation and dried leaves from around homes and structures.
- Plant less flammable, ornamental vegetation next to structures and use chunky mulch, shells, or gravel as mulch.
- Maintain a working irrigation system around

structures and use it according to local water restrictions.

- Cover eaves and other openings with wire mesh no larger than 1/8th of an inch.
- Keep combustible items, gases, and liquids away from structures.
- Overgrown vegetation around boats, ATVs, and sheds should be cut.
- Build homes with fire-resistant materials.
- Keep driveways at least 12 feet wide and free of overhanging branches and overgrown plants that may hinder emergency response.

## Be prepared when wildfires threaten the community.

- Create an evacuation plan and make sure all family members know and understand it.
- Follow the directions of emergency personnel and evacuate immediately if requested.
- Have important documents and other items, such as medication, readily available.
- Plan for pets and livestock.

## If time allows:

- Remove lightweight curtains that might ignite from radiant heat due to wildfires.
- Move flammable furniture away from windows and glass doors.
- Turn off the power and disconnect fuel supplies.

## In general:

Along with Firewise prevention measures, officials urge residents to follow these guidelines set by the Department of Agriculture and Consumer Service's Florida Forest Service (FFS):

- Check with local fire district officials to see if there are any burn restrictions in the area.
- Keep outdoor burning fires contained to an 8-foot diameter pile or non-combustible container. Fire setbacks must be at least 25 feet from forests, 25 feet from homes, 50 feet from paved public roads, and 150 feet from other occupied buildings.
- Obtain a burning authorization from the Florida Forest Service for piles larger than 8 feet in diameter. Call your local Florida Forest Service field office or fire district.
- Check the weather daily and don't burn on windy days or when the humidity is below 30 percent.
- Never leave a fire unattended, and make sure it is completely out before leaving.
- Keep a shovel and water hose handy in case the small fire starts to escape containment.
- Report suspicious activity to the Arson Alert Hotline at 1-800-342-5869.



# Wells & Septic Systems Before & After Flooding

## Wells — Well Water Safety

Did you know heavy rainfall from a tropical storm or hurricane can make your well water unsafe to use? If you are unsure what impact flooding has had on your well water, don't use it for drinking, making beverages, cooking, washing dishes, brushing your teeth, and washing areas of your body that may have been cut or injured until you've done one of the following:

- Bring water to a rolling boil for one minute; cool before use.
- Disinfect water using unscented household bleach (4-6% active ingredients); add 8 drops (about 1/8 teaspoon) per gallon of water, stir and let it stand for 30 minutes. If the water is cloudy, repeat the procedure.

If your well has been flooded, call the Florida Department of Health (FDOH) — Collier County, Environmental Health Division (239-252-5530) for information on how to get a sample of your well water and where to bring it for bacteriological testing. If the post flooding well water test reveals bacteria, both the well and water system need to be disinfected to ensure all unhealthy agents are destroyed. FDOH — Collier County has step by step instructions on how to conduct well disinfection at their web site, [www.collierhealthdept.org/](http://www.collierhealthdept.org/). Click on Environmental Health — Limited Use Water Monitoring — Post Flooding Well Disinfection. After well disinfection efforts are complete, the water needs to be tested again to verify it is safe to drink.

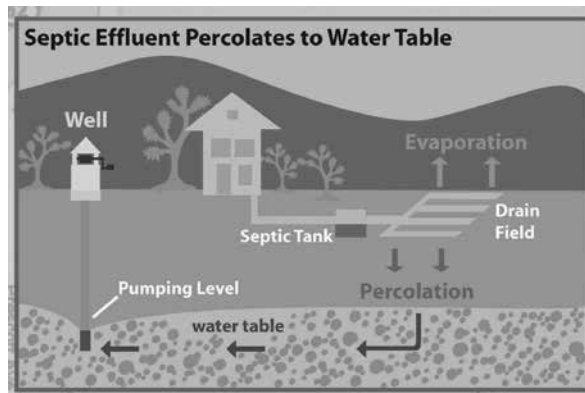
## Serious Health Risks

Disease producing microorganisms in contaminated water pose serious health risks to you and your family. These micro-organisms include viruses, bacteria, cysts, and parasites with health effects that can range from gastrointestinal infection to death. Don't take a chance on well safety. Be sure your well is properly constructed and maintained. FDOH — Collier County recommends that all wells be tested annually and after heavy rains or flooding.

## Septic Systems

### Preparing your septic system for flooding

Did you know that empty septic tanks are buoyant and can “pop” out of the ground during flooding? During Florida's tropical storm /hurricane season (June to November) make sure your septic tanks are full of liquid — don't have them pumped during this time. That's a simple precaution that can help your septic system survive flooding.



Septic and Wells

### Saturated drain fields can be a health hazard

When flooding or saturated soil conditions persist, a private septic system cannot function properly. In fact, organisms such as viruses and bacteria can enter the groundwater and potentially contaminate your drinking water supply.

Again, don't drink your well water until it is tested and proven safe! Whenever the water table is high, there is also a risk that sewage could back up into your home.

The only way to help prevent this problem is to relieve pressure on the system by using it less, or if possible, not at all. Do not do laundry or operate the dish washer, and consider renting a portable toilet until the drain fields dry out.

### After the Floodwater recedes

Once the floodwaters have receded, homeowners need to be aware of the following information as they check their septic systems:

1. If you have a sewage lift pump in the house or in a pump chamber, shut off the power before inspecting area to prevent electrical shock.
2. Do not have the septic tank or drain field repaired until the ground has dried. Often systems are completely functional when the soil is no longer saturated.
3. If you suspect your system is damaged, have your septic tank professionally inspected and serviced immediately.
4. Only trained, state licensed specialists should clean or repair septic tanks because tanks may contain dangerous gases.
5. All repairs must be permitted and inspected by FDOH — Collier County.

## Evacuation Quick Tips

If you need to evacuate your home because of flooding or hurricane threat, place the following items in a plastic bag and bring them with you.

- Your children's immunization and other important health and insurance records.
- Your insurance/ Medicare/ Medicaid cards, Driver's license or photo I.D.
- Each family member's medications, along with dosage information and physician's contact information.

If you are in an area prone to flooding and evacuation, you may want to gather critical documents in advance and keep them in a plastic bag. If the order to evacuate is given, having everything ready to go at a moments notice will save important time.



# Hazardous Materials



## CHEMICAL...

the word reminds us of the latest news story about an accident or environmental damage from improper storage, use or disposal of chemicals. However, many aspects of modern life are made possible or improved by responsible use and handling of chemicals.

## AROUND THE HOUSE

When we think of hazardous chemicals, we tend to think of manufacturing plants, train cars or trucks. While this is valid, we should also consider our own kitchen cabinets, garage, pool and other places in our home where potentially harmful chemicals are a part of our everyday life. We become so familiar with them that we may have forgotten that they can injure or even kill us.

Here are a few common household chemicals and their hazards.

- Chlorine (pool) – toxic fumes, corrosive and highly reactive
- Muriatic Acid (pool) – corrosive, toxic by inhalation and highly reactive
- Ammonia – toxic fumes and very reactive with other common cleaners
- Lighter Fluid – flammable
- Propane (grill) – highly flammable
- Gasoline – flammable with vapors that are heavier than air and can travel to an ignition source
- Motor Oil – combustible
- Weed Killer – toxic by ingestion or absorption through skin
- Bug Killer – toxic by inhalation or absorption
- Drain Cleaner – toxic or corrosive
- Nail Polish Remover – flammable
- Paint – flammable

- Fertilizer – toxic, possibly flammable or explosive

No matter how comfortable you are with a product, here are some important safety reminders:

- ALWAYS follow label directions
- Never mix chemicals
- Use only for approved purposes and in approved concentrations
- Store and dispose of safely, in accordance with the manufacturer's instructions
- Keep away from children
- Never store in containers that look like food or drink
- Understand first aid directions
- Keep the number of your local poison control center handy

If you suspect someone has been exposed to a chemical, consult your physician or:

- Florida Poison Information Network at **1-800-222-1222**

If injuries are serious or the victim has trouble breathing, call 911!

## TRANSPORTATION

Everyday hazardous materials are transported safely by highway, rail, air and sea. Because of the design, construction and safety features of chemical transportation containers, significant releases are rare. However, there are occasional accidents. In an accident you can be affected either at home or on the highway. If you are at home you will be notified through the media or local public safety agencies. Follow instructions quickly and carefully. You may be ordered to evacuate or to "shelter in place" depending on the chemicals involved. If ordered to evacuate do so immediately.

**Shelter in Place** means to stay inside where you are. If you are directed to shelter in place, close all windows and doors and turn off the air conditioner. Use duct tape and plastic sheeting to seal around doors, windows and other openings. If this is not available, damp towels or blankets can be used. The goal is to prevent outside air from entering your home. Do not go outside or open doors or windows, until local authorities tell you it is safe. Once the all clear is given, you should ventilate your home by opening doors and windows to purge any possible contaminants.

If you see or are involved in a traffic accident, take special care to avoid hazardous chemicals. Do not walk or drive through a vapor cloud or spill. Pay attention to any placards – diamond shaped panels with numbers and/or symbols on them. Provide the placard number to authorities. Small quantities of hazardous material may not have a placard.

The most important step to protect yourself and others is to avoid or reduce exposure to the chemical. If able, evacuate. Move crosswind to safety and keep other people from entering the area.

## Nuclear Power Plants

Florida has three nuclear power plants: Crystal River, north of Tampa; St. Lucie, north of Palm Beach; and Turkey Point, south of Miami. Even under worst-case conditions, an accidental release at any of these plants should not spread dangerous radioactivity over Southwest Florida. However, we might receive evacuees from other counties. They pose no health risk. However, agricultural products from those areas would not be permitted to enter into our food supply.

## Radioactive Materials

It is possible that a transportation accident could involve a radioactive substance. These materials are packed in limited quantities in very strong, well marked containers. If you see a marked package or suspect radioactive material may be present, move away from the area and advise emergency responders. Do not attempt to move it yourself.

## Biohazard Material

Another hazardous material that may be seen in transit is biohazard material. Healthcare facilities generate and dispose of this material, which may at first glance appear to be ordinary garbage.

Biohazard material could expose you to disease causing agents. As with other hazardous materials, you can usually avoid exposure by not contacting or handling the material or container. Call the authorities and explain the situation.

# Preparing for Acts of Terrorism

## What is Terrorism?

The Federal Bureau of Investigation (FBI) defines terrorism as “the unlawful use of force against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in the furtherance of political or social objectives.”

Terrorist acts are intended to:

- Cause mass casualties, panic and instill fear
- Produce a loss of critical resources
- Disrupt vital services and the economy

## What are the most likely targets?

- Public assembly areas
- Public and government buildings
- Mass transit
- Places of high economic impact
- Telecommunications facilities
- Historic or symbolic places
- Amusement parks
- Special events
- Large structures and bridges

Visiting these places is part of our way of life. You should not avoid them, but have a heightened sense of awareness when you visit them.

The United States has identified and monitors numerous terror related issues which include:

- Christmas Day Underwear Bombing
- Five Americans held in Pakistan
- Chicago Businessman charged with planning the attacks in Mumbai
- Denver man charged with terror plot
- American Somali Terrorist Connections
- Radicalized Americans such as the Fort Hood attacker
- The possibility of Guantanamo detainees being brought to the United States

Many attacks have been thwarted by alert citizens and law enforcement such as:

- Plot to bomb the Islamic Center of Pinellas Park, Fl. by Robert J. Gold-stein in retaliation for Palestinian suicide bombings of Israel (2002)
- Plot to blow up the Transcontinental Pipeline (Gulf Coast to NY) by Michael C. Reynolds (2005)
- Plot to blow up the Sears Tower, by Nasreal Batiste of Miami, FL (2005)

- Plot to blow up Fort Dix, NJ. US military base by six radical Islamist (2007)
- Plot to blow up a jet fuel artery at JFK Airport by 4 Islamist extremist, led by Russell Defraites of Brooklyn, NY (2007)

## What is the State of Florida doing to prepare for Acts of Terrorism?

According to state statute the Florida Department of Law Enforcement has established 7 Regional Domestic Security Task Forces throughout Florida. It is the job of these task forces to perform the following functions:

- Assist in assessing, defining and monitoring the State’s vulnerability to the impacts of a terrorist event.
- Assist in determining state and local government ongoing needs (personnel, materials, planning and training) to effectively respond to a major terrorist incident.
- Work with local emergency management to develop safe and efficient response plans for regional resources and conduct exercises to test and refine the capability of the task force to deploy regional response assets.

## How can I help?

Law Enforcement, Public Safety and Public Health officials have plans and procedures for responding to all types of hazardous situations. It is critical to be well informed and remain watchful of things around you. Report anything that appears suspicious or out of the ordinary by calling 911 or your local FBI office.

## How can I prepare?

Learn shelter-in-place procedures and prepare a sheltering kit. Shelter-in-place procedures are used for chemical or biological attacks (or even a hazardous spill)! Procedures for sheltering in place include:

- Identify a safe room in the home with as few doors and windows as possible. Bring/store your disaster supply kit in the safe room.
- Shutting off the ventilation system and latching all doors and windows to reduce airflow from the outside.
- Use precut plastic sheeting to cover openings where air can enter the room, including doors, windows, vents, and electrical outlets.

- Tape plastic sheeting around all doors and windows using duct tape to ensure a good seal.
- Listen to a battery-powered radio for the all clear.

## If there is an explosion:

- Take cover if heavy debris is falling. Leave the building as quickly as possible.
- NEVER take an elevator if there is a fire or if you question the structural integrity of the building.
- Use fire escapes and assist individuals with physical disabilities to evacuate.

## When you travel:

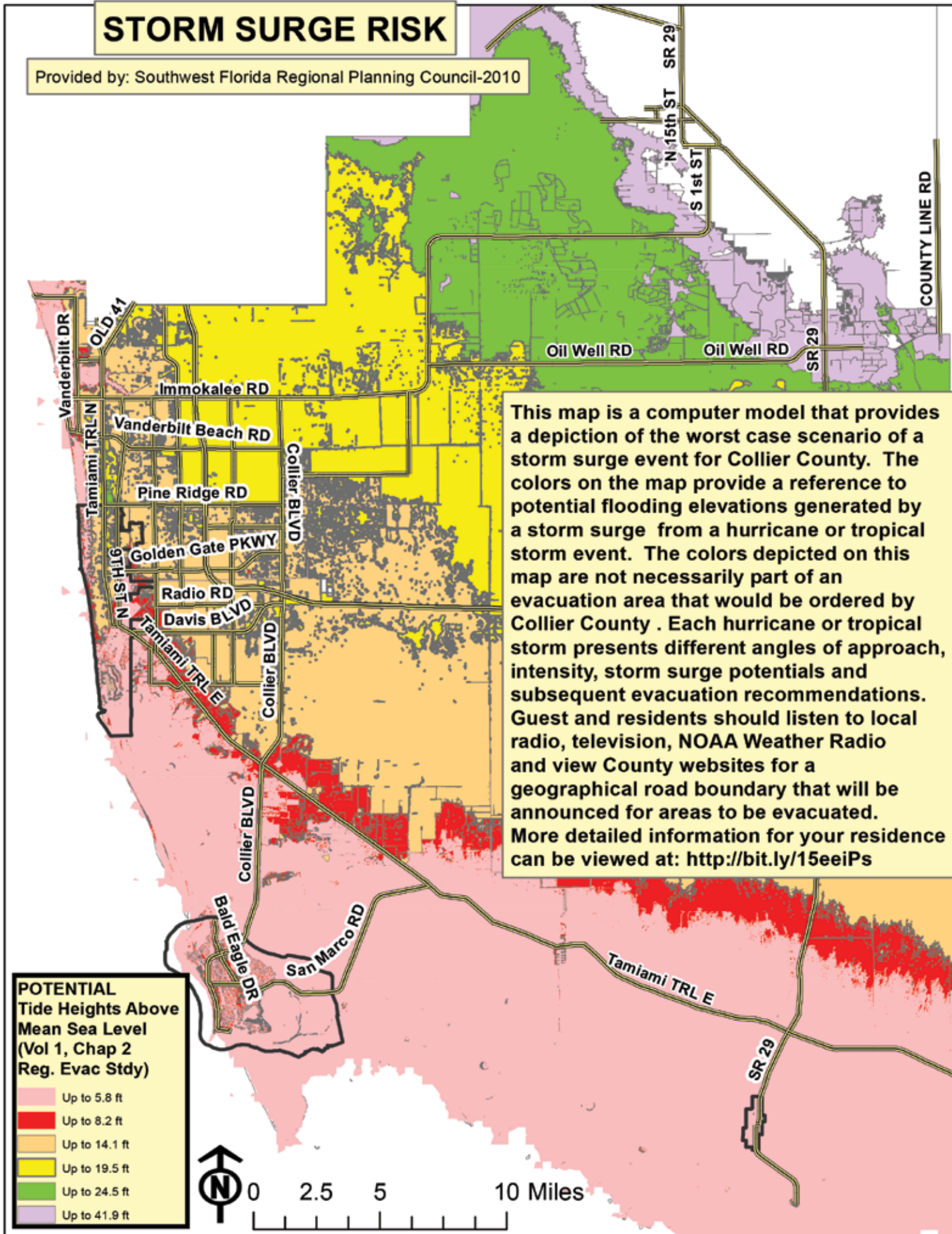
- If you are traveling to a foreign country, check the U.S. Department of State web page at <http://travel.state.gov/> for any travel advisories or procedure changes. Keep your identification papers in a secure place at all times.
- Check with the airlines in advance for any special safety procedures in place.
- Cooperate with officials who are responsible for security inspections.

As always...*See Something, Say Something!*



# STORM SURGE RISK

Provided by: Southwest Florida Regional Planning Council-2010



This map is a computer model that provides a depiction of the worst case scenario of a storm surge event for Collier County. The colors on the map provide a reference to potential flooding elevations generated by a storm surge from a hurricane or tropical storm event. The colors depicted on this map are not necessarily part of an evacuation area that would be ordered by Collier County. Each hurricane or tropical storm presents different angles of approach, intensity, storm surge potentials and subsequent evacuation recommendations. Guest and residents should listen to local radio, television, NOAA Weather Radio and view County websites for a geographical road boundary that will be announced for areas to be evacuated. More detailed information for your residence can be viewed at: <http://bit.ly/15eeiPs>

**POTENTIAL  
Tide Heights Above  
Mean Sea Level  
(Vol 1, Chap 2  
Reg. Evac Stdy)**

Light Pink	Up to 5.8 ft
Red	Up to 8.2 ft
Orange	Up to 14.1 ft
Yellow	Up to 19.5 ft
Green	Up to 24.5 ft
Purple	Up to 41.9 ft



# Flood Hazard

## What Causes Flooding?

Because of the low land elevations and the high water tables over much of Collier County, flooding is likely to occur in some areas during summer showers and thunderstorms. A storm with a considerable amount of rain in a short period of time will cause flooding in low-lying areas throughout the County. Low-lying areas may not be able to absorb all of the rainwater and often the canal network and drainage ditches will take time to alleviate the flooding conditions. The key is to understand general flood safety actions and flood hazards. For hurricane preparedness, please see page 4 of this Guide.

## Flooding Safety Actions

1. Never play in flooded areas where hidden sharp object, electrocution, and pollution are serious hazards.
2. Never drive into moving water. If you cannot see the roadway beneath the water, do not drive through it. The water may be deeper than it appears.
3. Do not use food that has come in contact with floodwaters.
4. Report downed power lines to Florida Power and Light or the local law enforcement authorities.
5. Keep tuned to local radio and television stations for flood warnings and information on emergencies.
6. Consider purchasing flood insurance for your home and belongings.

## Collier County Flood Hazard Information

In 2012, the Federal Emergency Management Agency (FEMA) mapped the County's floodplain and it is illustrated on a Digital Flood Insurance Rate Map (DFIRM). The County's DFIRM became effective on May 16, 2012. A simplified version of the DFIRM is available for viewing and it can assist in determining the approximate flood zone for a street address. It can be accessed on the County's webpage at [www.colliergov.net/floodmaps](http://www.colliergov.net/floodmaps). For assistance with the DFIRM, call the County's Floodplain Management Section Information Hotline at (239) 252-2942 or email at [floodinforequest@colliergov.net](mailto:floodinforequest@colliergov.net). The floodplain, also referred to as the Special Flood Hazard Area (SFHA), consists of all flood zones that start with the letters "A" or "V". Flood insurance is required for buildings in the SFHA if there is federal funding associated with the building (e.g. a federally backed mortgage). The following are descriptions of the County's flood zones:

- **VE flood zone** — Located along the coastline, this area requires special elevated building construction at or above the calculated flood elevation. This is a high risk area



for damaging wave action where waves are three feet or higher.

- **AE flood zone** — Inland from the VE flood zone, this area allows standard building construction at or above the calculated flood elevation. Generally speaking, the AE zone is located west of, or within one mile of US-41, but there are areas where the zone extends further inland. In coastal surge flooding AE zones, the wave height is less than three feet. In interior rainfall-induced flooding AE zones, the water depth is three feet or greater.
- **AH flood zone** — Inland from the coastal AE flood zone, this zone represents shallow flooding from rainfall and allows standard building construction at or above the calculated flood elevation. Generally speaking, the AH zone is located east of the coastal surge AE flood zone and covers a large portion of the interior area of the County.
- **Approximate A flood zone** — North and east of Immokalee are a very large region of the County that FEMA has determined is likely to have flooding impacts, but they have not completed any detailed studies to determine flood elevations. Flood insurance is required and is very expensive. A unique feature of the Approximate A flood zone is the requirement that a developer of property of 5 acres or 50 lots or greater, whichever is applicable, must undertake the engineering effort to calculate the region's flooding elevation.
- **X flood zone** — This area represents lands with elevations higher than the calculated flood elevations, is deemed outside the FEMA designated area of coastal flooding, no flood elevations are established, and flood insurance is not required. However, flood insurance is available and at greatly reduced rates.

## What About Flood Insurance?

Losses due to flooding are not covered

under standard homeowners insurance. Residents of Collier County and the incorporated cities can protect their homes, businesses, and contents through the National Flood Insurance Program (NFIP) or private flood insurance companies. Flood insurance pays for covered damage without requiring a federal disaster declaration. For new policies, there is generally a mandatory 30-day waiting period before coverage goes into effect. According to the NFIP, there is a 26% chance of a property experiencing a flood during the life of a 30-year mortgage.

If a property is located within a Special Flood Hazard Area and receives any form of federal or federally related financial assistance (e.g. mortgage), the owner is required to purchase flood insurance. Note that Collier County contains some undeveloped coastal barrier areas where flood insurance is not available.

If you currently have flood insurance, contact your insurance agent to make sure your coverage is adequate and up-to-date. The following limits of insurance are available through the NFIP:

### Coverage Amounts Available

Type of Structure	Building/Contents
Residential	\$250,000/\$100,000
Non-residential	\$500,000/\$500,000

## Floodplain Development Permit Requirements

As a NFIP community, all development in Collier County's regulated floodplain must be reviewed for compliance with local, state, and federal standards. This ensures that projects do not increase the flooding potential of other properties.

If your home or business is located within a flood zone starting with a letter "A" or "V" and does not meet the current flood elevation, the cost to repair damage or make improvements must be evaluated using the 50 percent rule. If the cost of the job exceeds 50 percent of the market value of the building,

it is considered a substantial improvement or substantial damage and must be brought up to current floodplain management construction standards.

Collier County has qualified personnel available to provide flood protection information, such as:

- Digital Flood Insurance Rate Map information,
- Flood insurance information,
- Site visits to discuss possible flood protection measures,
- Property protection information, and
- Review and critique of retrofitting plans prior to submittal.

Check with Collier County Growth Management Department at 239-252-2400 before you build or improve a structure, excavate, alter, re-grade, fill, dredge, or construct a seawall on your property.

## Information on Retrofitting Your Home

Retrofitting means making changes to an existing building in order to protect it from flooding or other hazards, such as high winds, and it is an important tool in hazard mitigation. Examples of retrofitting techniques include elevation of a structure, floodproofing (wet or dry), demolition, relocation, and construction of barriers such as levee or floodwalls.

Financial assistance for retrofitting projects can come in the form of loans, grants, and insurance payments. The assistance goes to individual property owners, communities, and states. Programs such as the FEMA's Hazard Mitigation Grant Program and the Flood Mitigation Assistance Program are designed to financially assist property owners with retrofitting projects. For additional retrofitting information and assistance, contact the County's Floodplain Management Section.

## Dumping and Drainage System Maintenance

It is illegal to dump debris, vegetation, etc. into any canal, ditch, or water body in Collier County. Debris dumped into a channel degrades water quality and limits the volume of the waterway. If you see anyone dumping illegal materials into a waterway, call the Code Enforcement Division at 239-252-2440.

If you see a canal, ditch, culvert, or roadside swale that needs to be cleaned call the Road Maintenance Division at 239-252-8924. If you see a broken silt fence at a construction site, call Engineering Inspections at 239-252-2391.



# Collier County Emergency Information

## SHELTERING & EVACUATION POLICY

Collier County continues to promote the strategy to “Run from the Water – Hide from the Wind” in evacuation decision-making. We evacuate those at risk from storm surge or fresh water flooding, which causes the greatest loss of life. The areas that are at risk vary because of the storm’s track and intensity. Residents that live in mobile or manufactured homes, as well as live-aboard boaters, will be ordered to evacuate in all hurricane events.

### The options available are few:

1. Remain at home if your residence is wind-worthy. If you elect to remain, the best place is in a walk-in closet, bathroom or inner hallway away from any windows.
2. Go to a local hotel/motel or stay with friends or relatives out of the evacuation area.
3. Leave the County; for landfalling storms that would approach from the west or southwest, the quickest way to relative safety would be via Alligator Alley (I-75) to the Florida east coast.
4. As a last resort, shelters will be opened from the list below depending on the threat. Stay tuned to local radio & TV for the list of shelters to be opened and the time of opening. Shelters will generally open concurrent with evacuation orders. If you do not have a personal means of transportation, using the established routes & stops, the Collier Area Transit (CAT) mass transportation system will transport people to shelters. For those who live in an area not serviced by the CAT, call the local fire station. The local fire chief will establish a pick-up route and timing for his/her area.

## SANDBAGGING & FLOODING EVENTS

Collier County **DOES NOT** issue sand and sandbags to the public. These items are readily available at do-it-yourself (DIY) type stores. Should you feel that you need some sort of rising-water barrier, Emergency Management staff recommends you consider using bags of topsoil that are readily available at the DIY stores. Then, following the event you can spread the soil around your property.

## COLLIER COUNTY SHELTERS (SEE INSIDE MAP)

### NAPLES AREA

#### *(Special Needs Shelter)*

**Palmetto Ridge High School**  
1655 Oil Well Rd (CR 858), 34120

#### *(Pet Shelter)*

**N. Collier Reg. Park**  
15000 Livingston Rd., 34109

**Barron Collier High School**  
5600 Cougar Drive, 34109

**Big Cypress Elementary**  
3250 Golden Gate Blvd, W, 34120

**Corkscrew Elem/Middle Sch**  
1065 Oil Well Rd (CR 858), 34120

**Cypress Palm Middle School**  
4255 18th Ave. NE, 34120

**Golden Gate Intermediate School**

5055 20th Place SW, 34116

**Golden Gate Middle School**  
2701 48th Terrace SW, 34116

**Golden Gate High School**  
2925 Titan Way, 34116

**Golden Terrace Intermediate School**

2965 44th Terrace SW, 34116

**Gulf Coast High School**  
7878 Shark Way, 34119

**Laurel Oak Elementary School**  
7800 Immokalee Rd., 34119

**Lely Elementary**  
8125 Lely Cultural Pkwy, 34113

**Lely High School**  
1 Lely High School Blvd, 34113

**Mike Davis Elementary**  
3215 Magnolia Pond Dr, 34116

**Naples High School**  
1100 Golden Eagle Circle, 34102

**North Naples Middle School**  
16165 Livingston Rd., 34110

**Oakridge Middle School**  
14975 Collier Blvd., 34119

**Parkside Elementary School**  
5322 Texas Ave, 34113

**Pelican Marsh Elementary**  
9480 Airport-Pulling Rd, N, 34109

**Sable Palm Elementary School**

4095 18th Ave. NE, 34120

**Veterans Community Park**  
1900 Immokalee Rd., 34109

### IMMOKALEE AREA (34142)

**Eden Park Elementary**  
3655 Westclox St.

**Highlands Elementary School**  
1101 Lake Trafford

**Immokalee High School**  
701 Immokalee Drive

**Immokalee Middle School**  
401 N 9th Street

**Lake Trafford Elementary**  
3500 Lake Trafford Rd.

**Pinecrest Elementary School**  
313 S 9th Street

**Village Oaks Elementary School**

1601 SR 29

## Emergency Information

### Collier Information Center

(Emergency Information)  
211, 311 OR (239) 252-8444

### Collier Emergency Management

Webpage: [www.CollierEm.org](http://www.CollierEm.org)

### NOAA Weather Radio (Collier County)

162.525 MHZ & FIPS CODE: 012021

### SkyWarn — Spotter Info & Training

[HTTP://WWW.SRH.NOAA.GOV/MFL/SKYWARN.PHP](http://www.srh.noaa.gov/mfl/skywarn.php)

## Local Media Outlets

### Radio — AM

WTPK	1200	Pine Island
WTLG	1240	Ft Myers
WNOG	1270	Naples
WWCL	1440	Lehigh Acres (Spanish)
WVOI	1480	Marco Island
WAFZ	1490	Immokalee (Spanish)
WCNZ	1660	Marco Island

### Radio — FM

WSRX	89.5	Naples
WGCU	90.1	Ft Myers / Naples (EAS*)
WMKO	91.7	Marco Island
WAFZ	92.1	Immokalee (Spanish)
WTLT	93.7	Ft Myers / Naples
WARO	94.5	Ft Myers / Naples
WINK	96.9	Ft Myers / Naples
WGUF	98.9	Naples
WAVV	101.1	Naples
WWGR	101.9	Ft. Myers
WSGL	104.7	Naples
WJPT	106.3	Estero

\*EAS—Emergency Alert System

### Television

	Antenna	Comcast® / CenturyLink® Prism™	Marco Island
WBBH (NBC)	20	2	2
WGCU (PBS)	30	3	3
WFTX (FOX)	36	4	4
WINK (CBS)	11	5	5
WZVN (ABC)	26	7	7
WEATHER CHAN.		47/225	11
Local Gov. Access		97	11