This photo captures the storm surge as it was rising during Hurricane Ian in Fort Myers Beach. The estimated height of the surge was 10-15 feet along the immediate coastline. There were 58 deaths attributed to drowning. Surge of up to 8 feet was pushed 15 miles inland and up to 24 miles along rivers. [City Of Naples Government/Xinhua via ZUMA Press]

The 2023 Pinellas County Hurricane Guide was developed in partnership with Pinellas County Emergency Management and the Tampa Bay Times Newspaper in Education program and includes activities to help all ages actively learn about hurricanes and what to do to get ready and stay safe.
Time is the one resource you cannot get more of.
Once a storm is threatening Pinellas County, there will be a limited amount of time for you to get ready, get set and protect yourself from impact. This guide will help you determine your risk, know what to do and what to expect.

READY: WE ARE AT RISK

Once Pinellas County is in the cone of uncertainty, there is a risk that we will be impacted by a storm. This can be in the next 3-5 days.

Page 3 .................... Storm surge
Page 4 ....................... Wind
Page 5 ........................ Flood
Page 6 ........................ What you need
Page 7 ........................ Who to plan for
Page 8 ........................ Where to get info
Page 9 ........................ Stay or go?

SET: THE THREAT IS REAL

As the storm moves closer and Pinellas County is forecast to have impacts, it is time to get set. Evacuation orders could range from 17-50 hours before impact.

Page 10 ............... Picture the threat
Page 11 ............... Get out of the zone
Page 12 ............... Know when to go
Page 13 ............... Secure your home
Page 14 ............... Evacuation options
Page 15 ............... Shelter options

PROTECT: THE IMPACTS ARE HERE

As conditions become unsafe, you will need to shelter in place. It is not safe to move around during and immediately after a storm.

Page 16 ............... Shelter in place
Page 17 ............... Outages
Page 18 ............... After the storm
Page 19 ............... Recovery begins
Page 20 .... Pinellas County contacts
STORM SURGE

Storm surge is the water that is pushed onto land as a hurricane makes landfall.

- It can range from a few feet to over 30 feet.
- It will impact coastal areas first, then move further inland.
- Surge is life-threatening.
- It is fast-moving and fast-rising.
- It can wash away buildings and roadways.

ACTION:
Know if you are at risk from storm surge.

KNOW YOUR ZONE

There are several ways to find out your evacuation zone:

- disaster.pinellas.gov
- Ready Pinellas mobile app (Android, iOS)
- 727-453-3150 (for Pinellas County landline phones only)

Evacuation zones are based on storm surge. This map shows the areas where storm surge could occur. See more about storm surge, page 10.

TIMING:

Storm surge and winds will start to arrive around the same time. Pay attention to when tropical storm-force winds are forecast to start. You need to be out of these areas before then.
WIND

Winds in a hurricane can range from outer bands that could be gusty winds, to devastating hurricane-force winds. The winds will impact the entire county.

- Winds can extend out for hundreds of miles (bigger than the cone).
- Tornadoes can occur in outer bands.
- Winds can last from a few hours to more than 24 hours.

ACTION: Know if your home is strong enough to stay in.

- Mobile and manufactured homes are very vulnerable to strong winds.
- Plan to evacuate to a stronger building, outside of an evacuation zone.
- Protect the openings to your home to keep the wind out.

TIMING: Know when the winds are expected to arrive.

- Buses used to assist with evacuations will stop running at least several hours before the arrival of tropical storm-force winds.
- Other response vehicles will stop running when conditions are no longer safe due to winds.

Power can be lost in high winds. If you rely on electricity for life-sustaining medical equipment, consider options. See who to plan for, page 7.

Hurricane Intensity Scale
Wind Damage

See animation:

This advisory from the National Weather Service, issued as Hurricane Ian approached Florida, shows the most likely arrival of tropical-storm-force winds, which affected the entire state.

Category 1
75-95 mph

Category 2
96-110 mph

Category 3
111-130 mph

Source: COMET® Website at http://meted.ucar.edu/ of the University Corporation for Atmospheric Research (UCAR), sponsored in part through cooperative agreement(s) with the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce (DOC). ©1997-2023 University Corporation for Atmospheric Research. All Rights Reserved.
Tropical storms and hurricanes can create a lot of rain in a short period of time.
• Areas prone to flooding can be overwhelmed.
• Localized flooding can last much longer than storm surge flooding.
• Flooding can occur in areas outside of floodplains, especially with high amounts of rain over a short period of time.

Look up your flood risk at floodrisk.pinellas.gov

ACTION: Know if you are at risk for inland flooding.
• Elevate valuables in your home.
• Sandbags or other flood barriers may help keep water out of your home only if the flooding is due to rainfall (not storm surge).
• Know if you have flood insurance and what is covered.
• Review information on pinellas.gov/flood-insurance.
• If you can, check storm drains near your home and remove any loose leaves or items that may block drainage. Do this before the storm.

TIMING:
Rains can start with the outer bands of a hurricane and last for days. The slower or larger a storm is, the longer rain may fall.

GOING BEYOND THE TEXT
TRACKING NATURAL DISASTERS
Weather and natural disasters affect our daily lives, health and the economy. For example, tsunamis, hurricanes, typhoons and tornadoes can be very costly to an individual or the community. Many of these disasters occur only in certain parts of the world. The stress and tragedy accompanying these events impact entire communities.

Use the Tampa Bay Times to keep track of natural disasters over a two- or three-week period. Keep a natural disaster journal. Identify the disaster and its location in your journal. Create a chart listing all the natural disasters. Choose a disaster that did not happen in your area and make a list of some of the ways in which you or other people in your community would be affected by this kind of disaster. Write a brief essay outlining the disasters and how they affect communities. Share your information with your class.

Standards:
SC.2.E.7.1; SC.6.E.7.8; SC.2.E.7.5; SC.K12.N.1.1; SC.912.E.7.6; SS.K.G.3.3; SS.1.G.1.6; SS.4.G.1.3; ELA.K12.EE.1; ELA.K12.EE.2; ELA.K12.EE.3; ELA.K12.EE.4; ELA.K12.R.2.1; ELA.K12.R.2.2; ELA.K12.R.2.4; ELA.K12.C.1.3; ELA.K12.C.1.4; ELA.K12.C.2.1; ELA.K12.C.3.1; ELA.K12.C.4.1; ELA.K12.C.5.1; ELA.K12.F.1.3; ELA.K12.F.1.4; ELA.K12.V.1.1; ELA.K12.V.1.3
Basic Emergency Supplies

GENERAL
- Water: One gallon per person per day, for at least seven days.
- Nonperishable food: at least a one-week supply.
- Non-electric can opener.
- Paper plates, plastic cups and utensils.
- Medications.
- Extra bottled oxygen if needed.
- Wipes, hand sanitizer, soap, toilet paper, feminine supplies, diapers.
- Eyeglasses and extra contact lenses.
- Flashlight or lantern.
- Battery-operated or hand-crank radio.
- Extra batteries.
- Cellphone with charger, extra battery backup, solar charger.
- Cash, preferably small bills.
- Books, cards, board games.
- Paper and pencil.
- Whistle.
- Rain gear.
- Insect repellent.
- Sunscreen.
- Full tank of gas in vehicle.
- Extra gas cans.

DOCUMENTS
- Driver’s license, passport, other ID cards.
- Social Security card.
- Birth certificate.
- Marriage license, wills, death certificates, military records and other hard-to-replace documents.
- Insurance policies for home, health, flood, auto, renters.
- Titles to house, cars and boats.
- Account numbers for bank, credit cards, savings and investments.
- Important numbers and emergency contacts.
- Medical records from pharmacy, doctors, blood type, vaccinations.

- Household inventory.
- Emergency Access Permit for barrier island residents and businesses.

Babies
- Diapers.
- Wipes.
- Clothing.
- Baby food.
- Formula.
- Sterilized bottles.
- Bottled water.
- Medications.
- Thermometer.
- Pacifier.
- Blanket.
- Comfort items.
- Plastic bags.

SERVICE ANIMALS AND PETS
- Pet food and water for two weeks.
- Collar and leash.
- Carrier or crate.
- Identification/updated microchip.
- County license.
- Immunization records.
- Photo.
- Medications.
- Toys/blanket.
- Cat litter, pan, scoop.
- Plastic waste bags.
- Disinfectant.
- Paper towels.
- Newspaper or other lining.

HOST HOME OR HOTEL
In addition to basic supplies:
- Pillow and blankets.
- Air mattress, sleeping bag, floor mat or other.
- Change of clothing for several days.
- Check with your host home for other supplies that may be needed.

PUBLIC SHELTER – GENERAL
In addition to basic supplies:
- Blanket, pillow, cot, folding chair or twin-size air mattress.
- Change of clothing for several days.
- Special dietary items (sugar-free, low sodium, gluten-free, vegetarian/vegan, etc.) with can opener, if required. Common food and water is supplied.
- Wearable medical alert tag.
- Ear plugs.
- Eye mask/covering for sleeping.

PUBLIC SHELTER – SPECIAL NEEDS
In addition to basic supplies:
- Wheelchair, walker, cane, other medical equipment.
- Oxygen concentrator.
- Nebulizer.
- Written instructions or orders regarding your care.
- Caretaker’s supplies.

HOME
(for if you shelter in place or when you return)
- Ice and coolers.
- Tarps with rope or elastic cord, sheets of plastic.
- Wrench, utility knife, hammer and nails.
- Duct tape.
- Dust mask.
- Portable toilet or large bucket with lid.
- Large garbage bags.
- Disinfectant.
- Household chlorine bleach with medicine dropper.
- Matches or lighter.
- Outdoor grill and extra propane or charcoal.
**Eligibility**

Residents of all ages who are electric dependent or who have medical needs requiring assistance are eligible for the program. Some examples include:

- **Needing oxygen.**
- **Requiring assistance with routine care and medications.**
- **Requiring mobility assistance.**
- **Dependent on electricity.**
- **Requiring transportation assistance.**

**You may register for the special needs program throughout the year.**

There are multiple ways to register:

- **Ask your home health care provider.**
- **Register online at pinellas.gov/special-needs**
- **To update your registration information, or request a form, call Pinellas County Emergency Management at 727-464-3800.**

**General guidance for pets**

- **Make sure county license, vaccinations and microchip contact information are up to date.**
- **Build a pet emergency kit. See what you need, page 6.**
- **Pinellas County offers pet-friendly shelters for dogs and cats. See shelter options, page 15.**

**GOING BEYOND THE TEXT**

**CHALLENGE YOUR CLASSMATES**

Much damage is done to homes and businesses each year by extreme weather. Using the classified ads in the Tampa Bay Times, compete with classmates to see who can identify the most businesses and services that might be of use to a community that has experienced any of the following disasters: tornadoes, hurricanes or floods. For example, you might pick an entertainer for the volunteers and residents of a tent city set up to house those who lost their homes as a result of a major hurricane. Think outside the box, be creative, and be prepared to explain your selections. Create a poster letting everyone know what services are available.

**Standards:** SC.2.E.7.5; SC.K12.N.1.1; ELA.K12.EE.1; ELA.K12.EE.2; ELA.K12.EE.3; ELA.K12.EE.4; ELA.K12.R.2.1; ELA.K12.R.2.2; ELA.K12.R.2.4; ELA.K12.C.1.3; ELA.K12.C.1.4; ELA.K12.C.2.1; ELA.K12.C.3.1; ELA.K12.C.4.1; ELA.K12.C.5.1; ELA.K12.F.1.3; ELA.K12.F.1.4; ELA.K12.V.1.1; ELA.K12.V.1.3
Staying informed is one of the best ways to stay safe during a disaster.

disaster.pinellas.gov
This website contains basic information that you need to prepare, as well as more information about many topics.

When there is an emergency, this is the site to go to for up-to-the-minute information, including recommendations on what actions to take, shelter openings and evacuation orders.

Ready Pinellas mobile application
This app has options to personalize emergency plans, checklists, insurance information, contacts, inventory and more. Upload information to your phone or mobile device so that you have access to it even when cell service is down. When there is an emergency, Ready Pinellas will provide up-to-the-minute information, including recommendations on what actions to take. Emergency notifications will be sent to your phone as needed.

To ask a question during an emergency:
• The County Information Center opens to receive phone calls and answer questions from the public. The hours vary and are announced on the website, Ready Pinellas and social media. The phone number is 727-464-4333.
• Live Chat is always available on the Pinellas County website 8 a.m. to 5 p.m. Monday through Friday. When there is an emergency, it is typically open the same time as the County Information Center and may be a more convenient option for those who are deaf or hard of hearing.

Social media
• Facebook for Pinellas County Government: facebook.com/PinellasGov
• Twitter for Pinellas County Government: @PinellasGov
• Twitter for Pinellas County Emergency Management: @PinellasEM
• YouTube for Pinellas County Government: @PinellasGov

Alert Pinellas
This free notification system enables Pinellas County Government and cities to provide critical information in a variety of situations, such as severe weather, boil water notices and evacuations. Receive messages for the locations you specify, through options that include email and text messages.

Emergency weather radios
• Get automatic alerts from the National Weather Service (NWS).
• Configure the radio to receive Pinellas County alerts only by using the Specific Area Message Encoding (SAME). The SAME code for Pinellas County is 012103.
• If the radio does not require a SAME, then tune to frequency 162.450.

GOING BEYOND THE TEXT
BEING PREPARED
As hurricane season approaches, look through the pages of the Tampa Bay Times for information about hurricane safety and preparedness. Print or cut out any articles you find and paste them on separate sheets of paper. Keep them handy with the checklists that you have created. Get help with your checklist on page 6. Checklists are a good way to make sure you have everything you need to be prepared. Be as specific as possible. For example, how many people live in your home? How many flashlights do you need? What size batteries and how many batteries do you need? Divide your class into groups. Assign one of the following tasks to each group:
• Create a complete checklist for pets.
• Create a checklist of important papers.
• Create a checklist of items for small children, people with disabilities, or elderly family members.
• Create a list of items that you must take with you or store safely in waterproof bags or boxes if you evacuate.
• Make a list of tasks to perform outside of your home.
• Make a list of tasks to perform inside of your home.
You also can do a lot of research online through websites for: Pinellas County Emergency Management, Florida Division of Emergency Management, The Pinellas County chapter of the American Red Cross and the National Hurricane Center. You may want to put all the information you gathered into a notebook for reference when a hurricane is threatening.

Standards: SC.2.E.7.1; SC.6.E.7.8; SC.2.E.7.5; SC.K12.N.1.1; SC.912.E.7.6; SS.K.G.3.3; SS.1.G.1.6; SS.4.G.1.3; ELA.K12.EE.1; ELA.K12.EE.2; ELA.K12.EE.3; ELA.K12.EE.4; ELA.K12.R.2.1; ELA.K12.R.2.2; ELA.K12.R.2.4; ELA.K12.C.1.3; ELA.K12.C.1.4; ELA.K12.C.2.1; ELA.K12.C.3.1; ELA.K12.C.4.1; ELA.K12.C.5.1; ELA.K12.F.1.3; ELA.K12.F.1.4; ELA.K12.V.1.1; ELA.K12.V.1.3
SHOULD I **STAY** or SHOULD I **GO**?

Use this tool to see if and when you would have to evacuate.

---

**Stay**

- If you live in a mobile home park?
  - **YES**: You are considered to be Zone A and must **ALWAYS** evacuate when Level A or higher is ordered.
  - **NO**: Do you have special needs?
    - **YES**: Consider staying in a special needs shelter, especially if you are dependent on electricity for medical devices.
    - **NO**: Do you live in an evacuation zone?
      - **I DON’T KNOW**: Not sure what evacuation zone you’re in? Look it up. **My Zone is: _____**
      - **YES**: You must **ALWAYS** leave when your zone is ordered to evacuate. You don’t have to go far; you can just go outside of the area ordered to evacuate.
      - **NO**: Are you in a zone ordered to evacuate?
        - **YES**: You will not have to evacuate. Consider being a host home to friends and family. Invite people to stay with you, and together you can secure your home and stock it with the essentials you will need to ride out the storm and survive the days that follow.
        - **NO**: You will not have to evacuate.

---

**Go**
If the weather forecast says surge height could be...

5-7 feet
- Roads are flooded; cars are flooded.
- Fast-moving storm surge may enter homes, with water above electrical outlets.
- Life-threatening conditions.

12-15 feet
- Storm surge is up to house rooflines in Evacuation Zones A and B.
- Homes can be moved from their foundations.
- You are not likely to survive this.

26+ feet
- Homes in Zones A and B may be swept off their foundations.
- Catastrophic damage along the coast.
- Extensive flooding in all zones: inside homes, cars, on roads.
- You are not likely to survive this.

Wind will affect the entire county. Mobile home residents and residents who are dependent on electricity must always evacuate due to winds for all category hurricanes.
THE TIMING OF EVACUATIONS
What to do and when to do it.

WHEN AN EVACUATION IS ORDERED
Evacuation orders are based on how long it might take for everyone to evacuate before the arrival of tropical storm winds.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Zone A and mobile homes</td>
</tr>
<tr>
<td>20</td>
<td>Zone B, Zone A and mobile homes</td>
</tr>
<tr>
<td>26</td>
<td>Zone C, Zone B, Zone A and mobile homes</td>
</tr>
<tr>
<td>42*</td>
<td>Zone D, Zone C, Zone B, Zone A and mobile homes</td>
</tr>
<tr>
<td>50*</td>
<td>Zone E, Zone D, Zone C, Zone B, Zone A and mobile homes</td>
</tr>
</tbody>
</table>

*Evacuation orders may be issued before a Watch or Warning. For a Category 4 or 5 hurricane these actions will need to occur earlier.

HURRICANE WATCH
Forty-eight hours ahead of the onset of tropical storm-force winds (39-73 mph):
- Fill vehicle gas tank.
- Get cash, secure papers and valuables.
- Refill medications.
- Fill containers and tubs with water.
- Secure yard equipment and furniture.
- Shutter your windows.
- See how to secure your home, page 13.
- If you are registered for special needs transportation, get your emergency kit ready. See checklist, page 6.
- Be prepared for an evacuation order to be issued at any time.
- Check updates to evacuation zones and shelter information. See where to get information, page 8.

HURRICANE WARNING
Thirty-six hours ahead of the onset of tropical storm-force winds (74 mph or more):
- Complete final preparations to evacuate or to shelter in your home.
- If your plan is to travel out of the area and you can leave at this point, go.
- If you are registered for a special needs shelter and will be getting transportation, be ready to leave.
- Be prepared for an evacuation order to be issued at any time.

GOING BEYOND THE TEXT | BECOME A REPORTER
Select several stories from the Tampa Bay Times that report on how people have coped with severe weather. Next, pretend you are a reporter and take notes as you interview someone in your class, family or community who has survived a close encounter with wild weather or water. Then, use your notes to create a news story. Remember to include facts that answer the questions: who, what, when, where, why and how.

Standards: ELA.K12.EE.1; ELA.K12.EE.2; ELA.K12.EE.3; ELA.K12.EE.4; ELA.K12.R.2.1; ELA.K12.R.2.2; ELA.K12.R.2.4; ELA.K12.C.1.3; ELA.K12.C.1.4; ELA.K12.C.2.1; ELA.K12.C.3.1; ELA.K12.C.4.1; ELA.K12.C.5.1; ELA.K12.F.1.3; ELA.K12.F.1.4; ELA.K12.V.1.1; ELA.K12.V.1.3
SECURE YOUR HOME

SET: SECURE YOUR HOME

- Get your supplies ready.
- Get your plans set to secure your home and protect your family.
- Monitor the news for evacuation orders.
- Protect yourself by sheltering outside of the evacuation zone during the storm.

House
- Shutter windows.
- Lower antennas.
- Lower/remove awnings.
- Elevate belongings and place sandbags for flooding from rain.
- Shut all doors.
- Before you leave, shut off power and/or breakers.

Garage
- Reinforce the doors with a brace kit or use long steel or aluminum bars.
- Place flood barriers against the bottom of the door(s) to seal the gap.
- Lock the door.

Yard
- Take all yard items inside.
  - Clear balconies, steps and porches.
  - Pick up/secure loose debris.
  - Super-chlorinate your pool.
  - Turn off all electricity outside.

Vehicle
- Fill gas tank.
- Check oil and water.
- Place emergency supplies in the trunk.
- Move to a higher location if you expect flooding.
- If evacuating, know your route and monitor traffic reports.

Boat
- Store your boat on land and secure to trailer.
- Secure loose items.
- Disconnect electric, water, fuel, other dock connections.

If you don’t have to evacuate...
- Invite evacuees to stay with you.
- Prepare a safe room.

To learn more: disaster.pinellas.gov
Where to Evacuate

Stay in Pinellas County. Choices may include:

- A home or business that is not in a zone ordered to evacuate. The structure should be sound enough to withstand winds of up to 150 mph in a major hurricane.
- A hotel or other accommodation, in an area not being ordered to evacuate. Visit St. Pete-Clearwater posts a listing of available accommodations available on their website during disasters: visitstpeteclearwater.com
- County-operated shelter openings will be announced. See page 8. Pinellas offers three types of shelters: general population, special needs and pet-friendly. For information on shelters, see page 15. For supplies you will need, see page 6.

Leave the area. Some things to keep in mind:

- Hurricanes are difficult to predict. They can impact the whole state and travel north to impact other states. Monitor where the storm is headed.
- Ensure your car is in good working order and the gas tank is filled.
- Check with hotels for availability and pet policies.
- Check airlines for flight status.
- Let someone know your travel plans.
- Bring a battery-powered radio to receive local information.
- Before you leave, check for restrictions upon re-entry to the state, county or parts of the county, like the barrier islands.
- Monitor the traffic.
- If you are using a transportation service such as taxi, Uber or Lyft, make arrangements early.

Public transportation during evacuations:

- Pinellas Suncoast Transit Authority (PSTA) runs most regular routes.
- Rides are free to shelters.
- Pets are allowed on the bus: cats and small dogs in a crate; large dogs on a muzzle leash.
- Service may stop several hours before conditions become dangerous.
- Updates: psta.net

If you cannot use public transit and need transportation assistance, you must register with the Special Needs Evacuation Program. See page 7.

Timing:

Give yourself plenty of time to arrive at a safe shelter before storm-force winds are forecasted to arrive.

- If you are leaving the area, leave by the time a Hurricane Warning is issued. See the timing of evacuations, page 12.
- If you are staying in Pinellas County, an evacuation would be ordered anywhere from 17 to 50 hours before arrival of the winds, depending on the speed of the storm. For different ways to stay informed, see page 8.

If you wait too long, you will not be able to leave your home. See shelter in place, page 16.
Public Shelters

When Pinellas County issues an evacuation order, officials will announce which shelters are opening. For different ways to stay informed, see page 8.

What to expect at public shelters:
• Crowded and noisy.
• Lights may remain on at night, or power may be out.
• Very basic food and water provided.
• Special dietary foods are not provided; you may bring your own food.
• See what you will need, page 6.

Families settled into their spots in the shelter at John Hopkins Middle School in St. Petersburg as Hurricane Irma approached in 2017. [Times]

THERE ARE THREE TYPES OF SHELTERS IN PINELLAS COUNTY:

General population shelters
• Open to all individuals in Pinellas County.
• No generators, so power can be lost.
• No cots, chairs, air mattress or bedding provided.
• Basic food and water is provided.
• It’s a lifeboat, not a cruise ship.

Special needs shelters
• For those who need minimal medical assistance or who are dependent on electricity for medical equipment.
• Cots are not available for everyone.
• Pets are not permitted. See page 7 for options.
• Basic food and water is provided.
• See special needs and transportation assistance, page 7.

Pet-friendly shelters
• Dogs and cats are kept in a separate location from owners, in a crate or carrier.
• The owner must be in the shelter to feed and walk their pet.
• Basic food and water are provided.
• Pet food is available, but you can bring your own.
• Registration is not required.
• See what you will need to bring, page 7.

GOING BEYOND THE TEXT

TURN AROUND
Did you know that just 6 inches of fast-moving floodwater can knock you off your feet and 2 feet of water can sweep an SUV off a road? Each year, more deaths occur due to flooding than from any other hazard. Of these deaths, many are preventable, but too many people continue to drive around the barriers that warn you the road is flooded. Floods can happen in most of the places where people live. Look in the archives of the Tampa Bay Times, using the digital edition, to find information about when and where the risks of flooding were high. Write a blog post in response to the following questions. How did the weather create those conditions? How quickly did the water level rise? Did people prepare for the possibility in some way? Was there any property damage or loss of life? Who is responsible for monitoring and predicting these conditions in your area? Write a second paragraph explaining how people can avoid injuries due to flooding.

Standards: SC.2.E.7.1; SC.K12.N.1.1; ELA.K12.EE.1; ELA.K12.EE.2; ELA.K12.EE.3; ELA.K12.EE.4; ELA.K12.R.2.1; ELA.K12.R.2.2; ELA.K12.R.2.4; ELA.K12.C.1.3; ELA.K12.C.1.4; ELA.K12.C.2.1; ELA.K12.C.3.1; ELA.K12.C.4.1; ELA.K12.C.5.1; ELA.K12.F.1.3; ELA.K12.F.1.4; ELA.K12.V.1.1; ELA.K12.V.1.3
Time to Protect From the Threat

In 1985, Hurricane Elena parked in the Gulf of Mexico and brought high waves into backyards and sea walls on Tampa’s Culbreath Isles. The storm was estimated to have caused $100 million in local damage. [Times (1985)]

When time has run out

There will be a point in time when it is no longer safe to try to leave.

- Winds will continue to gain strength and, once they reach 40 - 50 mph, conditions will not be safe for anyone to be outside.
- Fire and Emergency Medical Services will not be able to respond to emergencies.
- It is time for everyone to shelter in place.
- Surge will start in coastal areas and push inland.

Here are some of the conditions you may encounter and recommendations on how to best respond:

If flood water is rising in your home:
- Before you lose power, report your location to an emergency contact that is out of the area so that they can help first responders locate you after the storm.
- Shut off water service, gas service and electricity.
- Do not go outside and wade through the water.
- Remain inside.
- Move to the second floor or higher if needed.
- Stand on top of a counter or substantial piece of furniture to stay above the rising water.
- If you must go into your attic, take an axe or something strong enough to cut through your roof so that you can climb out if necessary.

If your home is being damaged by strong winds/tornadoes:
- Close interior door(s) to reduce pressure in your home.
- Go to a safe room: an interior room, closet or hallway on the lowest level of your home, preferably without undoing interior doors.
- Lie on the floor under a table or other sturdy object, or in a bathtub, if you cannot make it to a safe room.
- Curl up and cover your head with a mattress or other item if available.
- Do not leave your safe room until you are sure the storm has completely passed.
- It will seem calm as the eye passes. Be ready for severe weather to return once the eye passes.

Wait until the storm has passed to tend to any damage.

GOING BEYOND THE TEXT | THE DISASTER DODGERS

Check out the Disaster Dodgers videos to learn how to be prepared. This video – https://youtu.be/TbzvomQYjPE – teaches young people the difference between a disaster, emergency and hazard. Kids will also learn what types of emergencies to prepare for and what to do in order to prepare for them. Watch the video series and then write down the main points the Dodgers share. Using the cartoons in the Tampa Bay Times, create a cartoon based on the information you have learned in the video.

Standards: ELA.K12.EE.1; ELA.K12.EE.2; ELA.K12.EE.3; ELA.K12.EE.4; ELA.K12.R.2.1; ELA.K12.R.2.2; ELA.K12.R.2.4; ELA.K12.C.1.3; ELA.K12.C.1.4; ELA.K12.C.2.1; ELA.K12.C.3.1; ELA.K12.C.4.1; ELA.K12.C.5.1; ELA.K12.F.1.3; ELA.K12.F.1.4; ELA.K12.V.1.1; ELA.K12.V.1.3
After the Hurricane Passes

Expect normal services to be disrupted.

If the power goes out:
- **For six hours:** Move perishable foods into an ice-filled cooler. Meats and other perishable foods can stay above 40°F without spoiling for two hours.
- **For two days:** Food that is in the freezer can be stored safely for two days if you keep the freezer door shut.
- If you have an outside grill, cook any food that is left.
- From this point forward, you will need non-perishable food.
- Have a generator to run critical appliances.

For information on generator safety, see page 19.

The water supply is affected:
- Assume there is a boil water notice until you hear official news.
- To sterilize water:
  - **Boil** — Bring a pot of water to a rolling boil for one minute. You can do this outside on your grill.
  - or
  - **Bleach** — Add 1/8 teaspoon of unscented bleach per gallon of water and let stand for 30 minutes; bleach should contain 5.25 percent sodium hypochlorite.

There is a sewer outage:
- Service may stop several hours before conditions become dangerous.
- Do not flush your toilet or you could have a sewage backup in your home.
- To use the toilet, turn off your outside water supply, flush once, and line with a trash bag. Do not use cat litter.
- Once given the OK by officials, dispose of the emergency toilet’s contents into your household commode. Sanitize with bleach.
- As an option, use a portable toilet or a five-gallon bucket with a tight lid. Line with heavy-duty trash bag and use household bleach as disinfectant.

Phone, cable and cell service are down:
- Texting often works when other services do not. If your phone’s digital clock works, then you can send and receive texts. Pinellas County will send texts through Alert Pinellas to relay important information.
- Tune in to National Weather Service and a local radio station to receive information from officials.
- Use a solar charger for your phone.
Safety Tips

• Keep kids and pets with you.
• Avoid downed power lines. Report downed lines to the power company if you are able to make calls. See Pinellas County contacts, page 20.
• Avoid flooded areas and standing water. Do not wade through floodwaters, which could have live power lines, sewage, wildlife and dangerous objects.
• Watch for snakes, raccoons, possums and other animals, as well as insects that may have moved into your evacuated home.
• Prevent mosquitoes from breeding in standing water and try to protect yourself from bites.

DAMAGES
• Do not enter a home that has major damage to the roof and/or walls.
• Photograph and list all damaged or lost items, including their age and value where possible. Take photos of how high the water was in the house.
• Contact your insurance agent and file your insurance claim as soon as possible.
• Record your damage on the Resident Damage Reporting tool, online at disaster.pinellas.gov, to help the county assess communitywide damage.
• Service damaged septic tanks, cesspools, pits and leaching systems as soon as possible.
• Do not do work on your home that is beyond your limitations.
• Make sure contractors you hire are licensed.

CLEANUP
• Remove wet contents immediately to prevent mold, including carpeting, furniture, bedding and other items holding moisture. They can develop mold within 24 to 48 hours.
• Clean and disinfect everything that got wet.
• Mud left from floodwater can contain sewage and chemicals.

POWER
• Power companies will have to assess damages to the power plant, transmission and distribution lines, and the substations to determine what can be repaired quickly.
• Power restoration will start with the most critical facilities such as hospitals, 911 call centers and nursing homes.
• It could take a month or longer to get all power turned back on. In the first days of restoration, power may come and go. You can check for power outage information from your power company. See Pinellas County contacts, page 20.

DRIVING
Try to stay off of the roads as much as possible. If you must drive:
• Treat an intersection as a four-way stop sign if traffic lights are not working.
• Do not drive through standing water.
• Match your speed to road conditions.
• Maintain a safe distance from the car in front of you.
• Obey posted work zone speed limits and pay attention to altered traffic patterns in work zones.
• Obey all “road closed” signs.
• Have spare tires or repair kits.
The Weeks Following a Hurricane

If Pinellas County is included in a Federal Emergency Declaration, disaster assistance may be available. Register for assistance as soon as possible:
- DisasterAssistance.gov
- FEMA mobile app
- 800-621-3362. If you use 711-Relay or Video Relay Services, call 800-462-7585.

Stay updated on available services. See where to get information, page 8.

Generator Safety

- Keep generators in well-ventilated locations outside, away from all doors, windows and vent openings.
- Never use a generator in an attached garage, even with the door open.
- Place generators so the exhaust fumes can’t enter the home through windows, doors or other openings in the building.
- Install carbon monoxide (CO) alarms in your home. Follow manufacturer’s instructions for correct placement and mounting height.
- Turn off generators and let them cool down before refueling. Never refuel a generator while it is hot.
- Store fuel for the generator in a container that is intended for that purpose and is correctly labeled as such. Store the containers outside of living areas.

GOING BEYOND THE TEXT

MEASURING WEATHER

Did you know that barometers are very important when it comes to weather forecasting? According to meteorologist Nick Merianos from Bay News 9, “A barometer can measure the pressure of the atmosphere and it can tell us whether or not the air pressure is rising or falling. A meteorologist can use this information to determine whether a storm is coming or leaving. The air pressure changes all the time depending on if a storm is approaching or leaving.” It is simple to build your own barometer. You will need the following supplies: small coffee can, plastic wrap, scissors, a straw, an index card and a rubber band.
- Tightly cover the top of the coffee can with plastic wrap, using a rubber band to hold the plastic wrap in place.
- The cover should be tight, making the can airtight.
- Place the straw horizontally or sideways on the plastic wrap so that two-thirds of the straw is on the can.
- Tape the straw to the middle of the plastic wrap so that it will not fall off.
- Tape an index card to the can behind the straw. The straw will act as a pointer on the card.
- Carefully record the location of the straw on the index card with a pencil. If desired, marks can be drawn on the index card to make observing the changes easier.
- After 15 minutes, record the new location of the straw on the index card. Continue checking and recording the straw location as often as you want. High pressure will make the plastic cave in and the straw rise. Low pressure will make the plastic puff up and the straw descend. If possible, check your measurements with a real barometer. Monitor the weather forecast in the Tampa Bay Times for a week and compare it to the barometer readings. Create a chart to compare your barometer readings you get with the weather information in the Times. On your chart, note whether your mood is affected by the change in weather. Share what you have discovered with your class.

Sources: Bay News 9 Project Weather; Weather Wiz Kids

Standards: SC.2.E.7.5; SC.2.E.7.5; ELA.K12.EE.1; ELA.K12.EE.2; ELA.K12.EE.3; ELA.K12.EE.4; ELA.K12.R.2.1; ELA.K12.R.2.2; ELA.K12.R.2.4; ELA.K12.C.1.3; ELA.K12.C.1.4; ELA.K12.C.2.1; ELA.K12.C.3.1; ELA.K12.C.4.1; ELA.K12.C.5.1; ELA.K12.F.1.3; ELA.K12.F.1.4; ELA.K12.V.1.1; ELA.K12.V.1.3
### PINELLAS COUNTY CONTACTS

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<tr>
<th>Contact</th>
<th>Phone Number</th>
<th>Website</th>
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<tbody>
<tr>
<td>County Information Center (During emergencies)</td>
<td>727-464-4333</td>
<td>pinellas.gov</td>
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<tr>
<td>Florida Department of Health in Pinellas County</td>
<td>727-824-6900</td>
<td>pinellashealth.com</td>
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<tr>
<td>Pinellas County Animal Services</td>
<td>727-582-2600</td>
<td>pinellas.gov/animalservices</td>
</tr>
<tr>
<td>Pinellas County Consumer Protection</td>
<td>727-464-6200</td>
<td>pinellas.gov/consumer</td>
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<tr>
<td>Pinellas County Economic Development</td>
<td>727-464-7332</td>
<td>pced.org</td>
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<tr>
<td>Pinellas County Information Line</td>
<td>727-464-3000</td>
<td>pinellas.gov</td>
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<tr>
<td>Pinellas County Schools</td>
<td>727-588-6000</td>
<td>pcsb.org</td>
</tr>
<tr>
<td>Pinellas County Sheriff’s Office (non-emergency)</td>
<td>727-582-6200</td>
<td>pcsowell.com</td>
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<tr>
<td>Pinellas County Solid Waste</td>
<td>727-464-7500</td>
<td>pinellas.gov/solidwaste</td>
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<tr>
<td>Pinellas County Utilities</td>
<td>727-464-4000</td>
<td>pinellas.gov/utilities</td>
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<tr>
<td>Pinellas Suncoast Transit Authority (PSTA)</td>
<td></td>
<td>psta.net</td>
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<tr>
<td>St. Pete-Clearwater International Airport</td>
<td>727-453-7800</td>
<td>fly2pie.com</td>
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<td>Visit St. Petersburg/Clearwater</td>
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<td>visitstpeteclearwater.com</td>
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<td>Utility companies</td>
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<tr>
<td>Clearwater Gas</td>
<td>727-562-4600</td>
<td><a href="http://www.clearwatergas.com">www.clearwatergas.com</a></td>
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<tr>
<td>Duke Energy</td>
<td>800-228-8485</td>
<td>duke-energy.com/outages</td>
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<tr>
<td>Frontier</td>
<td>800-921-8101</td>
<td>frontier.com</td>
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<tr>
<td>Spectrum</td>
<td>855-222-0102</td>
<td>spectrum.com/services/florida/pinellas-county</td>
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<tr>
<td>TECO Peoples Gas</td>
<td>877-832-6747</td>
<td>peoplesgas.com</td>
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<tr>
<td>TECO (report outages)</td>
<td>888-223-0800</td>
<td>account.tecoenergy.com/outage</td>
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<tr>
<td>WOW!</td>
<td>866-745-3685</td>
<td>wowway.com</td>
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<tr>
<td>State agencies</td>
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<tr>
<td>Florida Attorney General’s Office (price gouging)</td>
<td>866-966-7226</td>
<td>myfloridalegal.com</td>
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<td>Florida Highway Patrol</td>
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<td>flhsmv.gov/florida-highway-patrol</td>
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The Tampa Bay Times Newspaper in Education program (NIE) is a cooperative effort between schools and the Times Publishing Co. to encourage the use of newspapers in print and electronic form as educational resources – a living textbook.

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**Credits**

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**Florida Standards**


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