



Office of Emergency Management, City of Philadelphia

Hurricane Safety Guide



Hurricanes can hit any where up and down the East Coast, as we learned from Hurricanes Irene and Sandy.

Hurricane season lasts from June through November, with the most activity from August through September. During hurricanes, the weather may become very bad and sometimes people may need to leave their homes because of flooding, high winds, and power outages.

Are you and your family prepared for hurricanes?

If you had to stay in your home for a few days during severe weather, would you have what you need to stay safe, comfortable, and healthy?

If you had to suddenly leave your home, without time to pack anything, would you be ready to go?

The time to start planning for an emergency is not in the middle of one. In an emergency, you're either READY or you're not.

The Office of Emergency Management has provided this guide to help you know what to do before, during, and after a hurricane hits.

For more information on how to get READY, visit phila.gov/ready.

Be Ready. Make a Plan. Get what you need. Check out our Severe Weather Guide, on our website, for more information about flooding, lightning safety, and tornadoes.

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How to Stay Informed

- Sign up for text and email alerts from **ReadyPhiladelphia** at www.www.phila.gov/ready.
- Follow the Philadelphia Office of Emergency Management on Twitter and Facebook @PhilaOEM.
- Visit our website at www.phila.gov/ready.



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Be Ready for Hurricane Season

Hurricanes can cause flooding and bring strong winds which can cause property damage, fallen trees, and downed power lines with possible power outages. Make sure you and your family are ready to deal with with these conditions. If you live in an area that has a history of flooding or has frequent power outages, you should be prepared to leave your home before the hurricanes arrives in Philadelphia. That way, you and your family will be safe rather than trying to travel during the height of the storm.

Decide where you will go.Will you be more comfortable staying with family or friends? Or, will you need to go to an emergency evacuation shelter if they are open?

If you go to an evacuation shelter, make sure you stay informed so you know where the shelters will be, how you can get there, and when the shelters will open. Whether you will stay with family or friends, or go to a emergency evacuation shelter, plan to leave before the storm arrives. There are some things you should do before hurricane season. There are other things you will need to do when there is danger of a hurricane hitting.

Before a Hurricane: Things to do now.

- Know your area's flood risk. To estimate your flood risk and flood insurance premium, visit www.floodsmart.gov, or call 1-800-427-2419.
- Think about getting flood insurance. Loss due to floods is not covered under a homeowner's policy. Flood insurance is offered through the National Flood Insurance Program (NFIP).
- If you live in an area that floods, keep materials such as sandbags, plywood, plastic sheeting, and lumber on hand to help protect your home.
- If possible, create barriers to prevent any floodwater from entering your home or building. Seal basement walls with waterproof compound.
- Elevate the furnace, water heater, and electric panel in your home if you live in an area that has a high flood risk. Remove other items from the floor. Move them to higher floor levels or store them high on shelves.
- Fill out a Family Emergency Plan, which will contain important contacts for you and your family in the event of any emergency. You can download a plan from our website.
- Learn the safest route from your home or place of business to safe, high ground in case you have to evacuate. This should be part of your Family Emergency Plan.
- Prepare a Go Bag with emergency supplies that you can grab in case you need to leave your home in a hurry. Ideally, you should leave your home before the hurricane arrives in Philadelphia, if your property is in a low-lying area or has a history of flooding.
- Make a list of personal property, including furnishings, clothing, and valuables.



Before a Hurricane: Things to do when a hurricane is coming.

- Turn off all utilities at the main power switch and close the main gas valvein case you need to leave. Do not touch any electrical equipment unless it is in a dry area, or you are standing on a piece of dry wood while wearing rubber-soled shoes or boots and rubber gloves.
- Fill bathtubs, sinks, and jugs with clean water in case regular supplies are not safe to use or drink.
- Board up windows or protect them with storm shutters or tape in order to prevent flying glass.
- Bring outdoor furniture, garbage cans, and other loose items inside.

What Goes in Your Go Bag?

This bag should include supplies that you'll need in case you need to leave. This bag should be easy to carry and should be the size of a backpack or a small suitcase with wheels. Keep your Go Bag in a place where you can get to it easily in case you need to leave in a hurry. You can put together your own Go Bag or buy an emergency supply kit online or at many local stores.



Items in your Go Bag should include:

- A first-aid kit.
- Sturdy, comfortable shoes or boots, lightweight raingear such as a poncho, and wet and cold weather gloves.
- A Mylar or space thermal blanket. They are very light weight, touch, and durable blankets. They retain body heat, which will prevent hypothermia and trauma shock.
- Bottled water and ready-to-eat non-perishable foods such as granola or energy bars.
- A working flashlight and extra batteries.
- A battery-operated AM/FM radio and extra batteries.
- A small, regional map.
- A notepad and pen.
- Cash, especially in small bills such as \$1s, \$5s, and \$10s.
- Extra set of car and house keys.

- Copies of your important documents such as insurance cards, photo IDs/licenses, birth certificates, deeds, proof of address, and your completed Family Emergency Plan. Keep these in a waterproof and portable container.
- Medication—be sure to refill medications before they expire. Keep a list of the medications each member of your household takes, why they take them, and their dosages. Also keep copies of all prescriptions and contact information of your doctors and pharmacists.
- Personal care items: hand sanitizer, feminine products, toothbrush and toothpaste, toilet paper, and wipes.
- Contact and meeting place information for your family and members of your support network.
- Child care supplies or other special care items.

Weather Words

Tropical Cyclones: Tropical Depression, Tropical Storm, Hurricane

A tropical cyclone is a general term for large thunderstorms rotating around an area of lowpressure, forming over warm tropical or sub-tropical ocean water. These are called:

- **Tropical Depression** when maximum sustained surface winds are up to 38 mph (33 knots).
- **Tropical Storm** an organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 to 73 mph (34-63 knots).
- Hurricane when sustained winds in a tropical cyclone equal or exceed sustained 74 mph (64 knots) or greater.

Other Severe Weather Words

- **Eye** center of a hurricane with light winds and partly cloudy to clear skies. The eye is usually around 20 miles in diameter, but can range between 5 and 60 miles.
- **Eye Wall** location within a hurricane with the most damaging winds and intense rainfall.
- Severe Thunderstorm a thunderstorm with winds 58 mph or faster or hailstones threequarters of an inch or larger in diameter.
- **Tornadoes** violent rotating columns of air that touch the ground; large severe thunderstorms and hurricanes can produce tornadoes. They can have winds estimated from 100 to 300 mph.
- **Storm Surge** abnormal rise of water caused by a storm, over and above the predicted astronomical tide. Storm surge is caused primarily by the strong winds in a hurricane or tropical storm.
- **Storm Tide** the rise in water level during a storm due to the storm surge and the astronomical tide. A 15 ft. storm surge on top of a high tide that is 2 ft. above mean sea level produces a 17 ft. storm tide.
- Inland Extent Storm Surge the surge can make its way well inland from the coastline. During Hurricane Ike, the surge moved inland nearly 30 miles in some locations in southeastern Texas and southwestern Louisiana. All locations along the U.S. East and Gulf coasts are vulnerable to storm surge.

Hurricane Scale

- **Category I** 74-95 mph winds with 4-5 ft. storm surge and minimal damage
- **Category II** 96-110 mph winds with 6-8 ft. storm surge and moderate damage
- **Category III** 111-130 mph winds with 9-12 ft. storm surge and major damage
- **Category IV** 131-155 mph winds with 13-18 ft. storm surge and severe damage
- **Category V** 155+ mph winds with 18+ ft. storm surge and catastrophic damage

What's the difference between Warnings and Watches?

A **Warning** requires immediate action and should be taken seriously. It means that severe weather is imminent in your area or is already occurring, based on either human observation or detected by Doppler radar.

A **Watch** means that the potential exists for the development of severe weather. While no immediate action for the public is required for a WATCH, you should keep up to date on the current weather situation and be prepared to seek shelter if necessary.

Warnings:

Listen closely to instructions from local officials on TV, radio, cell phones, for instructions from local officials. Evacuate immediately if told to do so.

• Hurricane Warning: Take Action!

Issued to alert people when hurricane conditions with sustained winds of 74 mph or greater are expected.

Issued 36 hours before tropical storm-force winds are expected. Warnings are issued to give you time to complete your preparations.

Tropical Storm Warning: Take Action!

Issued to alert people that tropical storm conditions with sustained winds of 39 to 73 mph are expected within your area within 36 hours.

• Extreme Wind Warning: Take Action Now!

Issued to alert people when extreme sustained winds of a major hurricane, 115 mph or greater, are expected to begin within an hour. Take immediate shelter in the interior section of a well-built structure.

Tornado Warning: Take Action Now!

Issued to alert people when a tornado has actually been sighted or has been picked up on radar in the area. Take shelter immediately in a safe sturdy structure.

Weather Words

Watches:

Listen closely to instructions from local officials on TV, radio, cell phones or other computers and websites for instructions from local officials. Evacuate if told to do so.



• Hurricane Watch: Be Prepared!

Issued to alert people that hurricane conditions with sustained winds of 74 mph or greater are possible. Because it may not be safe to prepare for a hurricane once winds reach tropical storm force, hurricane watches are issued 48 hours before tropical storm-force winds are expected.

• Tropical Storm Watch: Be Prepared!

Issued to alert people that tropical storm conditions with sustained winds of 39 to 73 mph are possible within 48 hours.

• Tornado Watch: Be Prepared!

Issued to alert people to the possibility of a tornado developing in the area. At this point, a tornado has not been seen but the conditions are very favorable for tornados to occur at any moment.

What to Watch for during a Tornado Watch:

- Dark greenish or orange-gray skies
- Large hail
- Large, dark, low-lying, rotating or funnelshaped clouds
- A loud roar that is similar to a freight train

Prepare for Hurricanes with a Mobile App

Be ready with the Hurricane App by the American Red Cross. Check out what is going on in your area during the storm. Make sure your family and home are ready. Find help and let others know you are safe even if the power is out – it is very important to do this if you live in an area where a hurricane may hit, or if you have loved ones who do.

To download the app to your android or iPhone visit: http://www.redcross.org/mobileapps/hurricane-app.

After a Hurricane: Cleaning Up



Fallen Trees and Downed Wires

Fallen trees not only damage cars, roofs, and other structures – they can also take down power lines.

NEVER go near a downed power line, even if the power is off in your home.

PECO says: Always assume power lines are energized. These include power lines on utility poles as well as those entering your home or buildings. Always keep yourself, your equipment, and anything you carry at least 10 feet from power lines. Even though you may notice a covering on a line, NEVER assume it is safe to touch. Stay Away!

Keep yourself and others away from any fallen power lines. You never know when they might be energized. Call PECO right away and report the location of the downed wires. Their emergency number is: 1-800-841-4141.

If a line falls on your car, stay in your car. If you must get out of the car, jump clear, do not touch any part of your car and the ground at the same time and stay clear of the fallen line.

For more information, please visit their website at: https://www.peco.com/SafetyandEducation/PowerlineSafety/Pages/default.aspx

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After A Hurricane: Cleaning Up (continued)

If You Have Flood Damage

- Before going into a building, check to see if the building's structure has any damages. Make sure it is not in danger of collapsing. Turn off any outside gas lines at the meter or tank, to let the building air out for several minutes to remove foul odors or escaping gas.
- Turn off the electricity in all flooded rooms. Watch for electrical shorts or live wires before turning off the main power switch. Do not turn on any lights or appliances until an electrician has checked the system for short circuits.
- Cover broken windows and holes in the roof or walls to prevent further weather damage.
- Take pictures of all damage and flood impacts. Keep receipts for all repairs if you intend to apply for disaster assistance or to make an insurance claim.

Clean Up Safely

The Philadelphia Department of Public Health offers these tips to help you and your family stay safe when cleaning up after a flood:

- Remove all water by mopping, pumping, wet vacuuming, or clearing drains.
- Clean and thoroughly dry all wet light fixtures. Don't turn the electricity on until they are dry!

Throw Out

- All ceiling tiles, paper products, baseboards, and insulation that were damaged by water.
- All drywall up to four feet above the floodwater line.
- Furniture that has absorbed water such as mattresses, sofas, and upholstered chairs.
- Medicines and food that touched floodwater.
- All perishable foods that have not been refrigerated for more than six hours.
- Any frozen foods that have thawed.

Make Your Own Disinfectant

Ingredients:

- 1/4 cup of bleach
- 1 gallon of water

Instructions:

- Pour bleach into water.
- Mix thoroughly.
- Dip a rag into the disinfectant and wipe dirty items.

Wet Vacuum, Shampoo and Air Dry:

• Carpets

Wipe Twice With a Disinfectant, Then Air Dry:

- Wood and metal studs
- Open windows and doors while cleaning. Keep them open for at least 24 hours after clean to help surfaces dry more quickly and to prevent mold. If you can, use fans or dehumidifiers to help dry things.

Wash with Soap and Water, Wipe with a Disinfectant, and Dry:

- Furniture, such as wooden chairs and cabinets, that doesn't absorb water.
- All contaminated floors, counters, and other surfaces.
- All cooking and eating utensils that were touched or splashed by floodwater.
- Foam rubber items.

Wipe with a Disinfectant or Wash in a Dishwasher in Hot Water:

Children's toys - Don't let children play with toys until they have been cleaned and disinfected!



Using Portable Generators Safely

During long power outages, you may want to use a portable generator to power some of your appliances and electronics. However, it is important to use portable generators safely. If you use a generator the wrong way, you could cause dangerous and deadly conditions. The Occupational Safety and Health Administration and the Consumer Product Safety Commission recommend the following tips when using portable generators:

Safety First: Know Your Generator

- Always read the manual that comes with your generator. It should include how to use the generator properly, what gauge electrical cords to use, and other safety instructions.
- Schedule your generator for routine maintenance as listed in the manual. This will help your generator operate at its best and ensure your safety.



Carbon Monoxide Poisoning

- Carbon monoxide poisoning can occur if you use a generator the wrong way. Carbon monoxide is an odorless, toxic gas. If you do not ventilate your home properly when using a generator, carbon monoxide will build up in your home.
- NEVER place a generator indoors.
- Keep the generator away from windows, doors, and vents.
- Symptoms of carbon monoxide poisoning include dizziness, headaches, nausea, and tiredness. If you or your family members have any of these symptoms, get to fresh air immediately and seek medical attention.
- Make sure you install a carbon monoxide detector in your home.
- Check the detector's batteries once a month to make sure they are fresh.
- Also, test your detector once a month to make sure it is working properly.

Injuries and Fatalities Due to Shock, Electrocution, and Fire

- Shocks and electrocution from generators occur from improper use of power or accidental energizing of other electrical systems.
- NEVER attach a generator directly to the electrical system of a home, office, or trailer WITHOUT a Power Transfer Switch. Hire a professional electrician who can install the switch properly.
- Hooking up a generator without a Power Transfer Switch can cause a "backfeed" inside your home and in utility lines outside your residence. If a "back feed" occurs, it can injure or kill you, your neighbor or utility workers working to restore power.
- Do not use portable generators that have damaged or frayed fuel lines or electrical lines.
- Always plug electrical appliances directly into the generator using cords supplied by or recommended by the manufacturer. Use heavy-duty extension cords that are three-prong grounded cords. Make sure the cords do not have any damage before you use them.
- Keep the generator dry. Operate it under a canopy. Make sure it is on dry, flat land where water cannot pool.
- Fires can occur if you refuel your generator improperly or if you store fuel improperly.
- Before refueling, shut down the generator. Allow it to cool. If you spill gasoline on hot engine parts, it could ignite.
- NEVER store fuel indoors. Store fuel in the proper containers. Store the containers away from flame producing devices, including the generator, that cause heat.

How to Stay Informed



Here are some additional resources to consider when preparing for severe weather conditions, including hurricanes:

Philadelphia Office of Emergency Management

Follow the Office of Emergency Management on social media – @PhilaOEM on Twitter, Facebook, Google+, Blogger, LinkedIn and its YouTube channel.

To learn how to prepare for an emergency: Website: www.phila.gov/ready Email us at: oem@phila.gov Other resources: Philly 3-1-1, Channel 64 -Philadelphia's Government Access station.

ReadyPhiladelphia

Sign up for emergency text and email alerts from the Office of Emergency Management through **ReadyPhiladelphia.**

In addition to emergency alerts, you can sign up for weather alerts, alerts from the Philadelphia Prisons in Northeast Philadelphia, and the PES refinery in Southwest Philadelphia.

Sign up at www.phila.gov/ready. Then, follow the sign up instructions to choose the alerts that you want to receive.

Philly311

There are lots of ways to connect with Philly311:

- In Philadelphia, dial 3-1-1.
- For callers outside Philadelphia or for those with VOiP (Voice over Internet Protocol), dial 215-686-8686.
- Download the Philly 311 free mobile app from the app store via your smart device (phone, tablet, etc.).
- Ask a question or submit a request using Facebook or Twitter @Philly311.
- Send your inquiry or request from your email to Philly311@phila.gov.

Other Sources:

Local News Stations Get the latest weather updates, road conditions, school closings, and the status of city agencies and court closings from local radio and TV news stations.

Philadelphia Streets

Department Call: 215-686-5560 Website: philadelphiastreets. com

Philadelphia Water

To report water main break and clogged drains: Call: 215-685-6300 Website: phillywatersheds.org

PECO

Customer Service: 1-800-494-4000 Emergency Hotline: 1-800-841-4141

PennDOT

For road conditions on Pennsylvania interstate highways: Toll Free: 1-888-783-6783 Out of State: 1-717-783-5186 Website: www.dot.state.pa.us

PGW

Contact PGW to report gas leaks and emergencies, 24 hours a day. If you smell gas or have an unsafe condition, immediately call: 215-235-1212.

Customer Service - Billing, General Information, and Special Programs: Call: 215-235-1000 Website: www.pgworks. com

SEPTA

Bus, subway, trolley, regional rail, and CCT Connect travel advisories: Website: www.septa.org

National Weather Service Website: www.weather.gov

Project Home

If you see a homeless person who may need assistance, call Project Home Outreach Hotline at 215-232-1984. During the call, be prepared to provide the address, location and description of the person in need.