

Handbook For

Emergency Preparedness

**Be prepared
Be informed**



**Hawaiian
Electric**

In partnership with:

Hawaii Emergency Management Agency



Oahu Department of Emergency Management



Maui, Molokai, Lanai Emergency Management



Hawaii County Civil Defense Agency



County of Kauai Emergency Management Agency



Aloha,

We thank you for taking the time and necessary steps to familiarize yourself with emergency situations and how best to prepare for them. Individual preparedness is a critical part of how well communities can weather a disaster together. Intense storm events, high tides and flooding are occurring more frequently, and every community is vulnerable.



At Hawaiian Electric, we work hard to provide you with safe and reliable electric service. But in emergency cases, power outages can occur, and we want you to be prepared. We also want you to understand why, and more importantly, how to minimize the inconveniences and dangers they cause.

This booklet was created to prepare you and your family for an emergency, though much of the advice can and should be used at all times. This edition also has been expanded to include information on wildfire safety and prevention as climate change brings warmer, drier conditions and the spread of non-native grasses and shrubs.

Please take the time to read this emergency preparedness guide and review it often. We hope it will help you take action in preparing for an emergency and to stay safe.

Mahalo,

A handwritten signature in black ink that reads "Shelee Kimura". The signature is fluid and cursive, with a long horizontal stroke at the end.

Shelee Kimura

President and Chief Executive Officer
Hawaiian Electric

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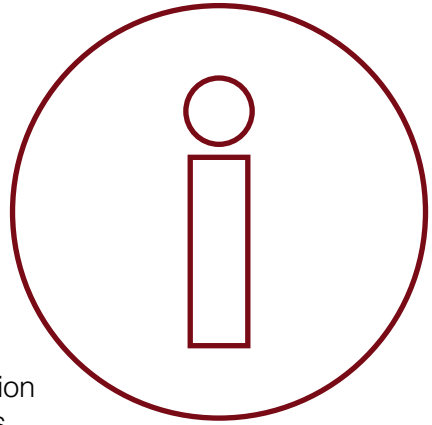


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Essential Information

The Hawaiian Electric Companies work in close partnership with their respective county Civil Defense agencies/Emergency Management departments and the Hawai'i Emergency Management Agency office during emergency and non-emergency-related power outages. This partnership is essential to ensure that correct, timely, and helpful information on the status of electric utility operations under emergency conditions is conveyed to the public through the appropriate emergency management departments and to federal, state, and city and county governmental offices.



During times of alert, emergency mobilization, and activation of county emergency operating centers, and during the recovery phase of a disaster, the electric utility companies provide coordinators to both the county and state emergency management agencies. For the most accurate information, turn on your TV or radio and listen to the official reports on various counties' Emergency Alert System.

Emergency signs and information

The Emergency Alert System (EAS) is a message notification that broadcasts over local TV, radio, and NOAA AM/FM Weather Radio. This information originates from the county Emergency Operating Centers as well as state and federal partners.

If the statewide outdoor warning sirens sound, or if you receive a wireless emergency alert (WEA), turn on your TV, radio, or mobile news app for updates. All radio stations have voluntarily agreed to participate in the EAS. In the event of a power outage, some stations are equipped with backup generator power and will continue to stay on the air. Stay tuned to these stations for further information and instructions.

During an emergency, a battery, hand-crank, or solar-powered radio will be your primary source of information. If using a battery-powered radio, be sure you have enough batteries to operate your radio for at least 24 hours. Emergency management information will also be available on TV and mobile devices. During a major power outage, the electric utility company will provide power restoration updates to the EAS.

Advanced warning signals

The National Weather Service (NWS) has an early warning system linked to satellites that records and tracks the formation of storms. The developing storm area is clearly visible on the satellite pictures and its progress is monitored locally by the NWS.

All NWS advisories, watches, and warnings, including tropical cyclone positions, can be heard on National Oceanic and Atmospheric Administration (NOAA) Weather Radio All Hazards (NWR). NWR is broadcast directly from the forecast office in Honolulu. Updates are broadcast 24 hours a day. If Hawai'i Emergency Management Agency asks you to evacuate, instructions will be given in the NWR broadcasts. The radio program broadcasts on frequencies 162.550 and 162.400 in the Hawaiian Islands. Program your weather radio with the Specific Alert Message Encoding (SAME) codes listed in the Reference tab.

NOTE: NWR receivers can be purchased at your local electronic store or online.

County SAME code

Hawai'i.....	015001	Kaua'i.....	015007
Honolulu	015003	Maui (Lāna'i & Moloka'i) ...	015009

Wireless emergency alerts

Wireless emergency alerts (WEAs) are made available through the Integrated Public Alert and Warning System (IPAWS) infrastructure. WEAs are designed to get your attention and alert you with a unique sound and vibration similar to a text message.

- WEAs can be sent by state and local public safety officials, the National Weather Service, the National Center for Missing and Exploited Children, and the President of the United States.
- WEAs will include the type and time of the alert, any action you should take, as well as the agency issuing the alert. WEAs can be issued for three alert categories: imminent threat, AMBER, and presidential.
- WEAs are not affected by network congestion and will not disrupt texts, calls, or data sessions that are in progress. Mobile users are not charged for receiving WEAs and there is no need to subscribe.
- WEA systems work when smart phone devices are set in the “ON” mode under your phone settings.
- To ensure your device is WEA capable, check with your service provider.

01

Preparation

Planning and Preparation

Communication plan

Evacuation plan

Special medical preparations

Home Survival Kit Checklist

Evacuation Kit Checklist

First Aid Kit Checklist

Protection of Pets

Planning and Preparation

Communication plan

Having a communication plan will help members of your household reconnect after an emergency.

A communication plan for your family should include information on the multiple ways you can contact one another in case communication networks are congested, unreliable, or unavailable.

Sending a text message is best as it uses less bandwidth.



If you know of people with disabilities or access and functional needs, remember to include information on any additional communication needs they may have.

Social media allows you to share information quickly and with large audiences. Posting to Twitter, Facebook, or other social media sites are effective ways to communicate to your network that you are safe.

Fill in your communication information located in the Reference tab and practice different emergency scenarios with everyone in your family. In Hawai'i, it is important to have an out-of-state emergency point of contact.

Evacuation plan

An evacuation plan is a vital step in preparing your family for an emergency. It contains information about safe shelter options, evacuation routes, and how you will reconnect if you become separated and other communication methods are compromised. Evacuation plans should be developed for each specific disaster that could happen and should be practiced to prevent confusion during an emergency.

- Always follow the instructions of local officials.
- Be familiar with alternate routes and other means of transportation out of your area. Remember that your evacuation route may be on foot depending on the type of disaster.
- Establish meeting places that are familiar and easy to find.

- Identify places to stay that will accept pets, if you have them. Media outlets will direct you to available shelters in your area based on recommendations from the Hawai'i Emergency Management Agency and the Department of Emergency Management. The list of available shelters may vary based on the type of emergency and other evacuation circumstances.

Special medical preparations

If you or someone in your care has a condition that requires special medication or life support systems, or if your medications require refrigeration, contact your doctor or pharmacist on how to handle emergencies and power outages. Contact your electric utility company's customer service office to inform them that an occupant at your residence is on life support.

Medication that requires refrigeration can be left in your refrigerator for up to six hours after losing power. After that, it would be best to store medications in an ice chest with ice packs or ice. Some pharmacies have contingency plans for power outages and will reissue medications as needed.

Evacuees with health needs must either be capable of taking care of their own needs or be accompanied by a caregiver. Have a contingency plan set up with an equipment company or home health agency that includes a backup generator for life support systems. If a backup generator is not available, call 911 or your local hospital.

Home Survival Kit Checklist

A home survival kit, emergency food, and water are essential during disasters or extended power outages that leave you confined to your home. Home survival kits should include the following:

- ☐ Portable radio (battery, hand-crank, or solar powered)
- ☐ Chemical light sticks or flashlights and lanterns (battery, hand-crank, or solar powered)
- ☐ Cellular phone with backup charger
- ☐ Extra batteries
- ☐ Manual can opener and bottle opener
- ☐ First aid kit and special medications, including actual prescription information. Have a minimum 14-day supply of any prescription medications and make sure to rotate medications frequently so they do not expire.
- ☐ 14-day supply of non-perishable foods needing little or no cooking (See our Food and Water Safety tab for more information and recommendations)
- ☐ Baby food and formula (if applicable)
- ☐ 14-day supply of food and water for your pet or service animal (if applicable)
- ☐ Water (a minimum of one gallon per person per day for drinking, cooking, washing, and sanitation for at least 14 days)
- ☐ Personal hygiene, sanitary supplies, and diapers (if applicable)
- ☐ Ice chest and ice or frozen ice packs
- ☐ Matches or a lighter in a waterproof container
- ☐ Butane, propane, or canned heat stove, and enough fuel for 14 days; or charcoal grill and charcoal
NOTE: *Never use a generator, grill, camp stove, or other gasoline, propane, or charcoal-burning devices indoors or in any partially enclosed area. Locate unit away from doors, windows, and vents that could allow carbon monoxide to come indoors.*
- ☐ Boards, shutters, or other shielding materials for windows or door openings. Permanent storm shutters offer the best protection for windows. If you do not have storm shutters, board up windows with 5/8" marine plywood (have boards cut to fit, labeled, pre-drilled, and ready to install).
NOTE: *Tape does not prevent windows from breaking.*
- ☐ Mosquito repellant
- ☐ Whistle to signal for help
- ☐ Extra cash in small bills
- ☐ Disposable plates, forks, spoons, knives
- ☐ Disposable hot and cold cups
- ☐ Paper napkins or towels
- ☐ Trash bags
- ☐ Heavy-duty aluminum foil
- ☐ Plastic storage bags
- ☐ Basic tools and duct tape

Evacuation Kit Checklist

In addition to your Home Survival Kit, an Evacuation Kit should be prepared in case you need to leave your home. Evacuation Kits should include the following:

- ☐ Sleeping bags or two blankets per person
- ☐ One complete change of clothing, face covering and sturdy shoes for each family member
- ☐ Important papers and documents (e.g., insurance and mortgage papers) in a waterproof bag or on a USB flash drive
- ☐ Have a full tank of gas or fully charged electric vehicle

First Aid Kit Checklist

Medical assistance may be difficult to find after a disaster strikes, so a first aid kit is important. Learn first aid, cardiopulmonary resuscitation (CPR) and emergency medical care, and keep reference materials with your medical supplies. Build or buy a first aid kit containing the following items:

- | | |
|--|--|
| ☐ Adhesive tape, 2" wide roll | ☐ Motion sickness tablets* |
| ☐ Applicators, sterile cotton-tipped | ☐ Nose drops* |
| ☐ Antiseptic solution* | ☐ Paper tissues, 1 package |
| ☐ Antibiotics (prescribed)* | ☐ Petroleum jelly |
| ☐ Aspirin (or aspirin-free tabs or caps)* | ☐ Plastic garbage bags |
| ☐ Baking soda, 4 oz. | ☐ Rubbing alcohol* |
| ☐ Bandages, 2" and 4" wide sterile rolls | ☐ Safety pins, assorted sizes |
| ☐ Band-aids, assorted sizes | ☐ Sanitary napkins |
| ☐ Cough medicine* | ☐ Scissors |
| ☐ Current medications (at least a 14-day supply) with prescription information* and medicine cup if necessary | ☐ Smelling salts |
| ☐ Diarrhea medication* | ☐ Soap |
| ☐ Ear drops* | ☐ Table salt, 8 oz. |
| ☐ Hand Sanitizer | ☐ Toothache remedy* |
| ☐ Laxative* | ☐ Tweezers |
| ☐ Mosquito repellent | ☐ Water purification materials* |

Pack additional necessities for any family members with health needs or who require medical care. Include proper instructions for medical assistants to follow if needed:

- | | |
|---|--|
| ☐ Extra eyeglasses or contact lenses with solution | ☐ List of physicians and medications with dosing schedule |
| ☐ Hearing aids with extra batteries | ☐ Medications kept in pharmacy-labeled bottles (this will expedite obtaining refills during a disaster) |
| ☐ Dentures | |
| ☐ Medical ID bracelets | |

*Check expiration dates and replace once a year or as needed.

Protection of Pets

Pet-friendly shelters are co-located with some general population shelters. Household pets entering a pet-friendly shelter must be caged or kenneled for safety and owners need to provide food and water for their pets.

Ensure your pet's safety by following the instructions below:

- Microchip your pets with your most updated personal information (name, phone number, and address).
- Place a rescue alert sticker on your home's windows and front door to let people know pets are inside. This free sticker can be ordered from the American Society for the Prevention of Cruelty to Animals.
- Know where your nearest pet-friendly shelter is.
- Have a backup plan; arrange a safe haven with friends or family and designate a pet caregiver.
- Agree on a meeting location for your family and include your pet in that plan.
- Bring your pet indoors well ahead of a natural disaster. Never leave a dog tied up outside during a disaster.
- Identify a safe indoor area that is protected from breaking glass, wind, and noise. If your pet becomes frightened, consider a crate.
- Talk to your veterinarian about getting sedative pills for your pets.

Providing oxygen to aquatic animals:

- Generally, fish can survive without the pump's aeration system for approximately two to 24 hours, depending on the type of fish and quantity of fish in the tank. Consult with your pet shop or veterinarian for specific information. Battery-operated pumps are available at pet supply stores.

02

Emergencies

Storm and Hurricane Information

- Storm preparations
- Staying safe during a storm

Tsunami Information

- Tsunami preparations
- Staying safe during a tsunami

Flood Information

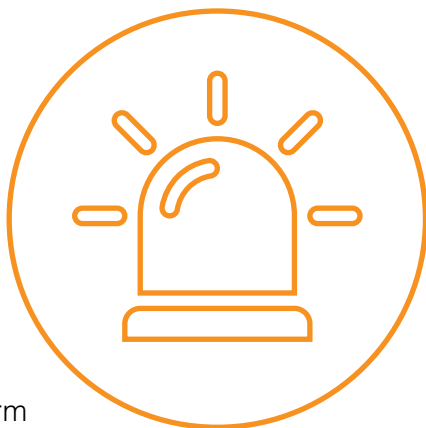
- Flood preparations
- Staying safe during a flood
- Evacuation safety
- Recovering after a flood
 - Returning home*
 - Cleaning up*
 - Receiving help in flood recovery*

Wildfire Information

- Wildfire preparations
- Staying safe during a wildfire
- Evacuation safety
- Recovering after a wildfire

Storm and Hurricane Information

The Hawaiian Islands sit in the midst of storm tracks. Hurricane season runs from June 1 through November 30, though storms are also known to appear outside of this seasonal window. Ranging from tropical depressions to full-blown hurricanes, these systems usually form off the coast of Central America and move in a westerly direction between 10 degrees to 20 degrees north latitude.



Tropical cyclones



Tropical depression

A low-pressure system or cyclone with sustained winds of less than 39 miles per hour (mph).



Tropical storm

A cyclone where winds range from 39 to 73 mph.



Hurricane

A tropical cyclone with winds of 74 mph or more. Torrential rains, destructive waves, and high waters known as storm surges may create flood conditions in coastal and low-lying areas. In most parts of the world, more lives are claimed by storm surge and flooding than by the winds of a hurricane.

When a tropical depression forms, the NWS issues a series of advisories that include watches and warnings based on the strength and position of an approaching storm.

Hurricane Watch	Hurricane Warning
Issued by the NWS if hurricane conditions could possibly reach the islands within 48 hours.	Issued by the NWS when dangerous hurricane conditions are expected to affect the islands within 36 hours or less.

Winds and storm-generated waves present significant hazards. Coastal flooding from the ocean often occurs in low-lying areas. Torrential rains from tropical storms can also turn small streams into raging torrents, causing dangerous rockslides, mudslides, and flash flooding.

Storm preparations

Don't wait until a storm is about to hit to make your emergency preparations. Prepare ahead of time to prevent unnecessary damage to your property and physical injury to yourself and others.

- Heavy surf often reaches island shores a day or two ahead of a tropical storm or hurricane, causing damage to homes and roadways. Storms approaching the islands from the south tend to do more damage than those approaching from other directions.
- Hurricane winds can cause trees and branches to fall. Remove damaged trees and overhanging branches to keep you and your property safe.
- Lawn furniture, garbage cans, and other items can become projectiles in high winds. Secure lightweight objects and anchor any items that may become airborne.
- Clear clogged rain gutters of debris to prevent water damage to your property.
- Install permanent storm shutters or board up windows with 5/8" exterior grade or marine plywood.
- Keep your automobile fueled and/or your electrical vehicle fully charged. If electric power is cut off, gas and charging stations may not be able to operate until power is restored.

Staying safe during a storm

When a hurricane watch is declared, make final preparations and review emergency plans with your family.

- When the outdoor warning sirens sound, listen to your radio, TV, or mobile device for instructions. When advised, or if threatened by the conditions in your area, evacuate to sturdy buildings or public shelters.
- During high winds, stay indoors. Do not go “sightseeing” during or immediately after a storm. You could risk your life as well as the lives of people who may try to help you.
- Stay away from windows and doors. Close all doors in your home and if you are in a two-story house, go to a central first floor room.
- Avoid telephone gridlock and keep lines open for emergency calls by limiting phone calls to less than a minute. Overloading circuits reduces the efficiency of the entire telephone system. Use text messaging instead as it uses less bandwidth to communicate.
- Consult with your building contractor or property manager ahead of time on actions you can take to make your house hurricane resistant.

Tsunami Information

Tsunamis are a year-round, 24-hour-a-day threat and hazard to all shoreline areas of Hawai‘i. When a potential tsunami with significant widespread inundation is imminent or expected, the Pacific Tsunami Warning Center issues a tsunami warning. This alerts the public that widespread, dangerous coastal flooding and powerful currents are possible, and may continue for several hours after the arrival of the initial wave.

Local urgent tsunami warning

This warning is issued when a local earthquake with the potential to create a tsunami has occurred, and the Pacific Tsunami Warning Center has determined damaging waves are probable. Sirens and other notification systems will sound immediately. Persons in the tsunami evacuation zone should evacuate immediately as wave travel time may be as short as 10–20 minutes after the warning.

Distant tsunami warning

When a distant tsunami warning is issued, evacuation sirens will sound a minimum of 3 hours before wave arrival time. Tsunami safe site locations will be broadcast over TV, radio, mobile device, or NWR. You must bring your own Evacuation Kit with you to the center.

Listen to tsunami alerts to distinguish between a regular tsunami warning and extreme tsunami warning. In the event of an extreme tsunami warning, additional zones may need to be evacuated.

Tsunami preparations

- Vertical evacuation is an option. Head to the fourth floor or higher of a 10-story or taller structural steel or reinforced concrete building.
- Remain at least 100 feet away from inland waterways and marinas connected to the ocean due to wave surges and possible flooding.
- Have a battery, hand-crank, or solar powered radio on hand in case electricity service is disrupted.
- Review the tsunami evacuation zone maps presented in the “Disaster Preparedness Guide” in the telephone yellow pages directory, or online at www.ready.hawaii.gov.
- If you live in an evacuation zone, plan and practice evacuation routes with your family and decide where you’ll meet ahead of time.
- If you must evacuate, shut off your electricity and gas at the main circuit breaker or valve. Turn off and unplug electric equipment and appliances to protect them from damage.
- If you are outside evacuation zones when a tsunami warning is issued, shelter in place and keep roadways open for people who must seek higher ground.

Staying safe during a tsunami

- If you are on the shoreline and feel the ground shake, observe an unusual receding of the ocean, or hear a loud roaring sound, go inland or to higher elevations immediately. These are natural tsunami warnings!
- Do not tie up telephone lines or cell phones with non-emergency calls. Increased cellular and landline telephone traffic can severely hamper the ability to request emergency assistance from first responders. If necessary, send a text message, which uses less bandwidth.
- Do not return to coastal areas until the “all clear” has been announced by emergency officials.

Flood Information

Floods are one of the most common hazards in the United States. Floods can affect communities, neighborhoods, entire river basins, and multiple states. However, all floods are not alike. While some floods develop slowly, sometimes over a period of days, flash floods can develop quickly, sometimes in just a few minutes and without any visible signs of rain.

Be aware of flood hazards, especially if you live in a low-lying area, near water, or downstream from a dam. Even very small streams, gullies, creeks, culverts, dry streambeds, or low-lying ground that appears harmless in dry weather can flood.

If your home suffers any flood damage, please follow our “Recovering after a flood” section in order to ensure your home is properly inspected, thoroughly cleaned, and safe to re-enter.

To learn more about flood hazards, check out the National Weather Service (NWS) campaign Turn Around Don't Drown (TADD) at www.nws.noaa.gov.

Flash flood or flood watch

A flash flood watch is possible within the designated watch area. Listen to your NWR, radio, TV, or mobile device and be prepared to move to higher ground.

Flash flood or flood warning

A flash flood warning is issued when flooding has been reported or is imminent. Take necessary precautions at once. If advised to evacuate, do so immediately. Get to higher ground and get out of areas subject to flooding. This includes dips, low spots, canyons, washes, etc.

Small stream flood advisory

Flooding of small streams, streets, and low-lying areas is occurring. Avoid areas already flooded, especially if the water is flowing fast. Do not attempt to cross flowing streams.

Flood preparations

According to the Federal Emergency Management Agency (FEMA), the smartest thing you can do to prepare for floods is purchase flood insurance. Protection against loss due to floods is not covered under a homeowner's policy. You should contact your property/casualty agent or broker about eligibility for flood insurance, which is offered through the National Flood Insurance Program. Generally, there is a 30-day waiting period for this policy to become effective, so don't wait until the last minute to apply.

- To find out your flood zone based on FEMA's Digital Flood Insurance Rate Maps, visit the DLNR Flood Hazard Assessment Tool at <http://gis.hawaiiinfip.org/FHAT/>.

Have your insurance policies, agent's name, and itemized list of personal property, including furnishings, clothing, and valuables, in a secure location such as a safe deposit box. Photographs and videos of your home (inside and out) are helpful, as they will assist an adjuster in settling claims and help prove uninsured losses.

Follow these tips:

- Know the safest route from your home or place of business to high, safe ground should you have to evacuate quickly.
- If you live in an area that is frequently flooded, keep materials such as sandbags, plywood, plastic sheeting, and lumber on hand that can be used to protect your property.
NOTE: *Sandbags should not be stacked directly against the outer walls of a dwelling. When wet, the bags may create added pressure on the structure.*
- Be aware of streams, drainage canals, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without typical warnings such as rain clouds or heavy rain.
- Have an evacuation kit ready to go.
- Avoid building in a flood plain unless you elevate and reinforce your home.
- Grade yards and patios to speed drainage.
- Elevate your air conditioner, water heater, and electric panel if your property is susceptible to flooding.
- Install "check valves" in sewer traps to prevent floodwater from backing up into the drains of your home.
- Construct barriers (levees, beams, floodwalls) to stop floodwater from entering the building.

- Seal walls in basements with waterproofing compounds to avoid seepage.
- Keep a portable radio, emergency cooking equipment, and flashlights in working order.
- Move essential items, valuable papers, and valuable belongings to upper floors or higher elevations.
- Do not allow children to play along streams or near drainage ditches. Both of these areas can quickly turn deadly during times of heavy rainfall.
- Put cleaning supplies in a box and elevate the box to a countertop, tabletop, or to higher elevations to prevent chemical spills into floodwaters.
- Store drinking water in clean containers in case water service is interrupted. You can sanitize containers by first rinsing with bleach. Water stored in bathtubs, sinks, and other vessels should be used for washing and sanitation purposes, not drinking.
- Check and clear drainages.

Staying safe during a flood

If you are caught in the house by sudden rising waters, move to the second floor (if possible) or to the roof if necessary. Take warm clothing, a flashlight, and portable radio with you and wait for help. Do not try to swim to safety. Rescue teams will be looking for you.

Head for higher ground and stay away from floodwaters!

- Tune in to your TV, radio, or mobile device and follow emergency instructions. Keep a battery, hand-crank, or solar powered radio on hand in the event of a power outage.
- The safety of your family is the most important consideration. Floodwaters can rise very rapidly, so be prepared to evacuate before the waters reach your property.
- If you have a flood-related emergency and need assistance, call 911.



Evacuation safety

Evacuate by car (if safe). Bring your evacuation kit.

- Do not camp or park your vehicle along streams and ditches, particularly during dangerous conditions. Both of these areas can quickly turn deadly during times of heavy rainfall.

Driving in flood conditions:

- Do not drive where water is over the roads. Parts of the road may already be washed out or the water may be much deeper than it appears. It only takes six inches of water to reach the bottom of most passenger cars, causing loss of control and stalling.
- If your car stalls in a flooded area, abandon it as soon as possible. Floodwaters can rise rapidly and sweep a car and its occupants away. Less than two feet of rushing water can carry away most vehicles, including sport utility vehicles and pickup trucks.
- Be especially cautious at night when it is harder to recognize flood dangers.

Walking in flood conditions

- Avoid flooded areas, and do not attempt to walk across stretches of floodwaters that are more than knee deep.
- Do not walk through moving water. If the moving water is above your ankles, STOP! Turn around and go the other way. Six inches of moving water can make you fall.
- If you have to walk in water, walk where the water is not moving and use a stick to check the firmness of the ground in front of you.

Recovering after a flood

Check those around you for injuries. Do not attempt to move seriously injured people unless they are in immediate danger of death or further injury. If you must move an unconscious person, first stabilize the neck and back, then call for help immediately.

- Keep a battery, hand-crank, or solar powered radio with you so you can listen for emergency updates, news reports, and information on whether the community's water supply is safe to drink.
- Stay off the streets and avoid moving water. If you must go out, watch for fallen objects, downed electrical wires, and weakened walls, bridges, roads, and sidewalks.
- Avoid floodwaters. The water may be contaminated by oil, gasoline, or raw sewage. The water may also be electrically charged from underground or downed power lines.

- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse.
- Stay at least 30 feet away from downed power lines and report them to your electric utility company's Trouble Line listed in the Reference tab.
- Stay out of any building if it is surrounded by floodwaters.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.
- Use the phone only to report life-threatening emergencies.
- Do not visit disaster areas. Your presence might hamper rescue and other emergency operations.

Returning home after a flood

Return home during daylight hours, after authorities have indicated it is safe to do so. Follow these safety tips and above all, use caution:

- Do not enter your home if there is standing water next to the outside walls. You will not be able to tell if the building is safe or structurally sound.
- Before you go in, walk carefully around the outside of your house and check for loose power lines and gas leaks. You will know if there is leaking gas if you smell the putrid, distinctive odor that is added to gas to let people know gas is leaking. If you find downed power lines or gas leaks, call your electric or gas utility company's Trouble Line. Refer to the Reference tab for a list of contact information.
- Do not turn on your gas line when you return home.
- Turn off the power at your home at the main fuse box or circuit breaker panel. Even if the electric utility has turned off the power to your area or removed your electric meter, you must still make certain the power supply to your home is disconnected. You do not want the electric utility company to turn it on without warning while you are working on it. If you have to step in water to get to your main fuse box or circuit breaker, call a licensed electrician. If you can get to your main fuse box or circuit breaker without going through or standing in water, you can turn off the power yourself.
- Use a battery-powered flashlight (not lanterns, torches, or matches) to inspect a damaged home. A fire or explosion could occur from gas leaks or other flammables.

NOTE: *Your flashlight should be turned on outside your home — the battery may produce a spark that could ignite leaking gas.*

- If appliances are wet, turn off the electricity at the main fuse box or circuit breaker. Unplug appliances and let them dry out. Have the appliances checked by a professional before using them again.
- Refrigerators, freezers, and ovens may have foam insulation and sealed components that suffered little water damage. However, since these appliances hold food they should be cleaned, disinfected, and checked by a professional or replaced. If a professional technician suggests an expensive appliance should be replaced, get the opinion in writing and discuss it with your insurance adjuster before purchasing another one. Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.
- Call your insurance agent or broker who services your flood insurance policy. The agent will submit a loss form to the National Flood Insurance Program. An adjuster will be assigned to inspect your property as soon as possible. Take pictures of damages and keep good records of repair and cleaning costs.
- Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.

The American Red Cross and FEMA have published an excellent booklet, "Steps for Returning Home After the Flood," that takes you through a comprehensive, step-by-step approach to recover from floods or water damage to your home. Download it at www.redcross.org.

Cleaning up

The Hawaiian Electric Companies advise you to have your home inspected and repaired by a licensed electrician whenever your home has experienced water damage. If your appliances got wet, have them inspected and repaired by a professional before using them. Attempting to inspect and repair your home's electrical system and appliances by yourself could result in serious injury or death.

- Perishable items that pose a health risk should be listed and photographed before discarding. Discard fresh food and previously opened medicines that have come in contact with floodwaters.
- Cover broken windows and holes in the roof or walls to prevent further weather damage. The expense of these temporary repairs is usually covered under your flood insurance policy (subject to the policy deductible; check with insurance company).

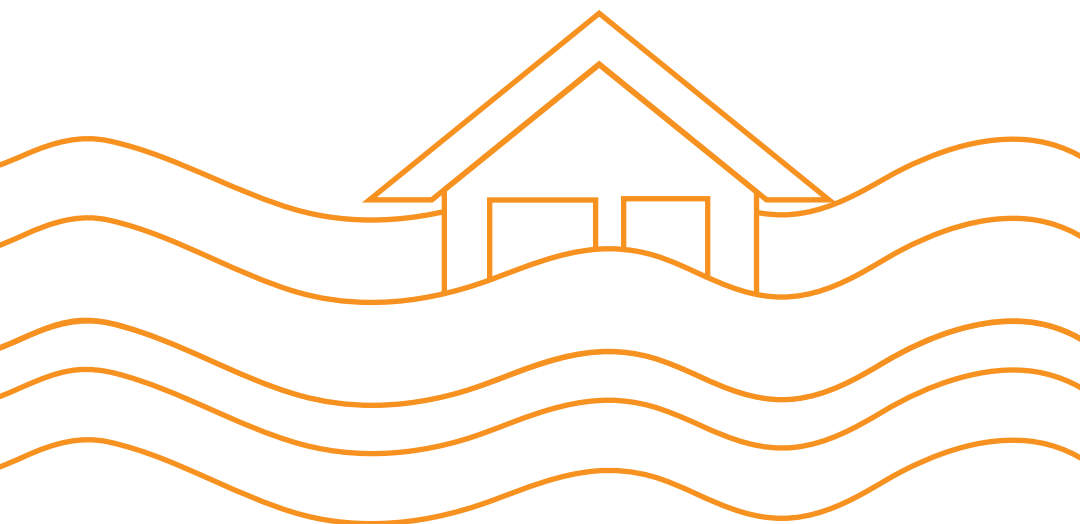
- Flooded basements should be drained and cleaned as soon as possible. Remember, however, that structural damage can occur by pumping out the water too quickly. After the surrounding floodwaters have subsided, begin draining the basement in stages — about one-third of the water volume each day.
- Refrigerators, sofas, and other hard goods should be hosed off and kept for the adjuster's inspection. Mix one teaspoon of baking soda to a quart of water to use as a deodorizer when cleaning major kitchen appliances. Any partially damaged items should be dried and aired; the adjuster will make recommendations as to their repair or disposal.
- A drinking water advisory to disinfect the water from the tap may be issued in your community.

Receiving help in flood recovery

Use your radio, TV, or mobile device to find out where to go for assistance, or to learn about assistance being provided by the state or federal government or other organizations. You may also call the American Red Cross.

The American Red Cross may be able to provide you with a voucher to purchase new clothing, groceries, essential medications, bedding, essential furnishings, and other items to meet emergency needs.

- Be wary of people who drive through neighborhoods offering to help clean or repair your home. Check references.
- If you hire cleanup or repair contractors, be sure they are qualified to do the job.



Wildfire Information

The frequency and size of wildfires across Hawai'i has grown substantially in the last two decades due to invasive fire-prone grasses moving in and around unprepared communities, increases in drought episodes, and increases in human-caused accidental ignitions. Fires can and do happen at any time of year on both windward and leeward sides of all islands in Hawai'i.

Wildfire is unlike other natural hazards. In Hawai'i, most fires are started accidentally by people, which we can do better to avoid. Fires can only burn where there is fuel to burn, which we can do a lot to control through vegetation management and other actions. There is great opportunity for preventing and reducing Hawai'i's wildfire threat if we all take appropriate wildfire-aware and wildfire-preparedness actions.

Wildfires are predictable. Stay attuned to your surroundings throughout the year. Notice when vegetation is becoming dry. Notice the weather. Keep in mind that rain does not alleviate fire risk over the long-term — in fact, it increases fire risk by growing more vegetation that eventually dries out and adds fuel to our already-flammable landscapes.

Throughout the year, pay attention to when grasses begin to dry out and turn yellow, brown, and gray. This is an indicator that fire danger is increasing. This is the time to be especially careful with any activities that may cause a spark. It is also the time to be sure that you have cleaned your yard and property so it can withstand a wildfire event and any wind-driven embers.

Also notice the temperature, humidity, and wind on any given day. Fire risk is highest when it is hot, dry, and windy. These are the times to be especially mindful of any activities that spark and refrain until fire risk is lower.

Wildfire Preparations

There is little you can do to protect your home when a fire is already occurring. The time to prepare your home and yard is throughout the year, on a regular basis, and especially as conditions are getting dry and more fire prone.

Preparing yourself, your family and your home for a wildfire is safer and exponentially more effective if done in advance, and as part of your regular habits, housekeeping, and landscaping.

Prevent Ignitions

- Be wildfire-aware in all you do.
- Put your campfires out cold.
- Be very careful with any equipment that may spark when you are using it.
- Avoid using sparking equipment, fireworks, campfires, and open BBQs on dry windy days or if there is dry vegetation nearby.

Prepare Your Family and Animals

- Make and practice a family evacuation plan. Include any neighbors who might need your assistance during an evacuation and pre-plan with them too. Remember to also include your pets.
- Prepare an evacuation kit with necessary items for your family and pets.
- If you have livestock, create a livestock evacuation plan and establish backup boarding and feed plans in case your lands are destroyed by fire.

Protect Your Home

- Replace combustible building materials with non-combustible materials, such as rock walls instead of wood fences.
- Prevent embers from being able to enter your home structure by screening your lanai, vents, and around the bottom of your home if it is on post and pier.
- Move all combustibles away from the home, and do not store flammable materials under or near your house.
- Remove all dead and dying vegetation and leaves from around the entire perimeter and structure of your home. Remember, if an ember lands in your yard, you do not want it to have anything to ignite.

Prepare Your Yard

- Keep grass short and keep tree branches at least 10 feet from the ground. This reduces “ladder fuels,” which are hazardous pathways for fire to travel from the ground up to tree canopies, where they are spread fast and far by wind.
- Reduce wildfire’s ability to spread by separating vegetation into clusters that are separated by 10 feet of space in between. Position these clusters as far away from homes and structures as possible.
- Keep your yard watered. Healthy, hydrated plants are slower to ignite than dry or dead plant material.
- Remove all dead and dry vegetation.
- Consider replacing plants that drop leaves or need a lot of water with plants that are more drought tolerant. This will help reduce maintenance, save water and money, and mitigate fire risk. Many native plants and succulents are perfect choices for low maintenance and drought-tolerance.
- Develop a yard maintenance schedule that prioritizes mowing grass, trimming low tree branches, and removing leaf/needle piles, dry and dead vegetation, and plant parts that are touching the home structure. Sweep your steps and pathways, too.

Staying safe during a wildfire

Evacuate early. When in doubt, get out!

- The safest thing you can do is to evacuate well in advance of an evacuation order. Most fatalities occur when people stay to defend their homes or get caught in evacuation traffic. By leaving early, you give your family the best chance of surviving. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job in a safer environment.



Evacuation safety

- Follow your family evacuation plan. Take your evacuation kit containing your family and pet's necessary items. Choose an escape route away from the fire, or as directed by emergency officials. Initiate your animal evacuation plan for livestock.
- Don't wait to be told by authorities to leave. In an intense wildland fire, they won't likely knock on every door. If you are advised to leave, don't hesitate!
- Drive only on hardened surfaces and never drive or idle on dry grass.

Recovering after a fire

Coming home after a wildfire can be difficult. The damage is often unknown until the homeowner returns days or weeks later. Always check with officials before attempting to return to your home.

Once home, follow this safety checklist:

- Check grounds for hot spots, smoldering stumps, and vegetation.
- Check the roof and exterior areas for sparks or embers.
- Check the attic and throughout your house for any hidden burning sparks or embers.
- Check for fire damage to your home.
- Check the electric meter and the main circuit breaker. If they are damaged, do not attempt to turn them on. Be sure all appliances are in the off position before turning the main power back on.
- Check any wells, water pumps, lines, etc. to ensure they are in working order.
- Contact 911 if any danger is perceived.
- Consult local experts on the best way to restore and plant your land with fire-safe landscaping.

Electrical Safety and Important Information

Electrical Safety

- Indoor electrical safety tips
- Outdoor electrical safety tips
- Photovoltaic safety tips
- Electrical fires

Downed Power Lines

Steps to Restore Power Safely After a Storm

Electric Shock

- Low voltage shock
- High voltage shock

Excavation Precautions

Vegetation Management

Circuit Breaker Panels, Fuse Boxes, and Main Breaker Switch Information

Ground Fault Circuit Interrupter (GFCI) Information

- Testing GFCI devices

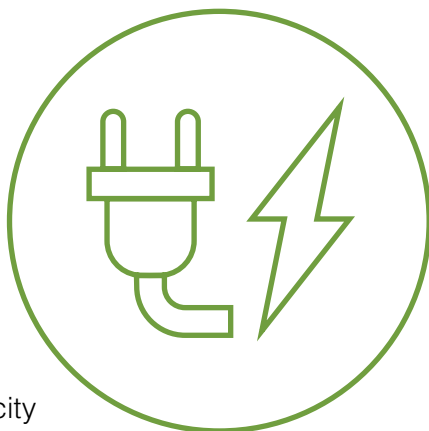
Power Outage Information

- Elevator safety
- Generator safety
- Momentary power interruptions
- Minimizing the use of electric power after an outage

Filing a Claim With Your Electric Utility Company

Electrical Safety

Learn the basic rules of electrical safety and what to do in emergency situations to protect your family and yourself.



- Remember, electricity always tries to reach the ground. It travels over “conductors” or anything that allows electricity to flow. It is important that electricity is handled safely around people, water, trees, damp ground, and metal, which are all conductors of electricity.
- People are conductors of electricity. Your body can act like a lightning rod and carry the electrical current to the ground, causing electric shock.
- Rubber is an insulator and is the opposite of a conductor. It is used in personal protective equipment worn by professional electricians when handling electricity.
- Most sounds and noises (such as humming or static) are normal, but if you hear unusual sounds (such as an explosion) from the power lines or transformers, please call your electric utility company’s Trouble Line at the number(s) listed in our Reference tab.

Indoor electrical safety tips

- Do not touch a faulty appliance, plug, or bare wire. They can make you part of the electric circuit and put you at risk of electric shock.
- Frayed wires are dangerous anywhere and should be repaired immediately or replaced.
- Replace inflexible electric cords with cords certified by UL (Underwriters’ Laboratories, a leader in product safety testing), which meet specific safety requirements and guidelines.
- Repair any appliance that sparks, emits smoke, or shocks you.
- Never use any electric appliance while in the tub or shower.
- Do not use any appliance or touch an electric cord while you are touching metal pipes and faucets or anything wet.
- Outlets near water sources (bathrooms, kitchen sinks, outdoors) should be GFCI (ground fault circuit interrupter) protected.
- Unplug appliances before cleaning them or removing anything from them (such as burnt toast from your toaster).

- Do not yank on the electric cord when unplugging appliances, which can damage the wires. Take hold of the plug firmly and pull straight.
- Train children not to put things into electric outlets. Use plastic outlet guards.
- Keep work areas clean. Oily rags, newspapers, and sawdust can catch fire from electric sparks.
- Never overload a circuit with high-wattage appliances. Overloading a circuit could cause the wire and breaker to heat up and could potentially start an electrical fire. Check the wattage on your appliance labels and be sure the combined wattage of all the appliances you want to plug into the same circuit does not exceed 1440 watts for a 15-amp circuit and 1920 watts for a 20-amp circuit.

Outdoor electrical safety tips

- Keep ladders, fruit pickers, antennas, kites, balloons, unmanned aircrafts (also known as drones), and trees away from overhead power lines to prevent them from getting tangled and potentially causing a power disruption or safety hazard.
- Look up and around for power lines before starting any harvesting or tree trimming activity. If a tree is touching overhead power lines, it may be energized and you should not touch it.
- Only professionally trained and certified arborists should trim trees that are touching or in close proximity to power lines.
- If you have a problem with objects coming in contact with power lines, call your electric utility company's Trouble Line.
- Never use electric power tools or appliances in the rain or while standing in water.
- For outdoor locations, use only lights, cords, and fixtures intended for outdoor use. Plug into outlets with a GFCI or GFI.
- Never climb on utility poles, pad-mounted transformers, or transmission towers.
- Do not let anyone shoot or throw anything at insulators on power lines.
- Do not climb into electric utility substations. If you see someone climbing or trespassing into a substation, call 911 or call your electric utility company's Trouble Line.
- Pad-mounted transformers are for underground wiring. The transformers are inside sturdy metal cabinets, which are locked for safety. Never pry them open. If you find an unlocked door on one of these cabinets, call your electric utility company's Trouble Line.

- If you are caught in a lightning storm, stay away from trees and whenever possible, stay dry. Go indoors and keep clear of windows. Unplug the TV and other electronic appliances.
- Never build a swimming pool or other structure under the power line leading to your house.
- Before digging, learn the location of underground power lines as well as the TV cable, gas, and water pipes. Call Hawai'i One Call for assistance in locating underground cables and pipes at 811 or 1-866-423-7287.

Photovoltaic safety tips

Photovoltaic (PV) panels generate electricity directly from sunlight; however, panels may generate electricity while exposed to other sources such as moonlight, fire, and intense lighting. With the growing number of solar rooftop systems in Hawai'i, it is important to know the proper steps to take in an emergency situation. Here are some tips to keep safety first:

- Do not touch PV panels and components. Always assume they are energized. In the event your solar system is damaged in a storm or torn from your roof contact your solar contractor and insurance company.
- Call 911 in the event of an emergency or fire. Do not handle your PV system, throw water on it, or inhale fumes that may be emitted, as they are flammable and toxic. Inform 911 operators that there are solar panels on the roof and specify whether they are solar water heating or PV.
- Notify first responders upon arrival that there are solar panels present and point out where the A/C disconnect switch is. This information is helpful for first responders' safety as well as protection of your home and system.
- If you have battery storage for your PV system, be sure to have proper signage visible to alert the existence of a PV battery near the main switch breaker.
- Lithium ion batteries, which are commonly found in energy storage systems, provide high energy density. Take the proper precautions to avoid fires that may be caused by overheating, overcharging, electrical shorting, etc. Be sure to read the manufacturer's instructions on how to care for your batteries.
- Contact your solar company to inquire about specific operational details and safety measures relevant your system.

Electrical fires

NEVER USE WATER ON AN ELECTRICAL FIRE! Water can carry the electricity back to you and you could receive a deadly shock. If a fire occurs, first make sure everyone has left or is leaving the house before attempting to fight a fire. Follow these safety tips:

- Keep a multi-purpose, type “ABC” (type “C” for electrical fires) fire extinguisher handy.
- Mount the fire extinguisher in plain view, near an escape route and away from potential fire hazards such as heating appliances.
- Read the manufacturer’s instructions to know how to use and care for your extinguisher.
- Do not fight the fire if the fire could block your escape route.
- Make sure someone calls the fire department for help even if the fire seems small and you think you can put it out.
- If the fire is confined to an appliance, electrical cord, outlet, or switch, shut off the power by opening your main breaker, which is usually located near the electric meter; or shut off the circuit breakers at your electric service panel; or unscrew the fuses at the fuse box. Do this ONLY if you can do so without endangering yourself.
- Use your multi-purpose fire extinguisher to put out the fire. Even if you manage to put out the fire, have the firefighters check to be sure the fire is not smoldering out of plain sight.



Downed Power Lines

Most overhead power lines are not insulated. When lines from a utility pole fall to the ground or on a guardrail, assume they are energized and dangerous. Energized lines can be deceiving by appearing lifeless and harmless. Don't touch these lines!

Stay a safe distance away — at least 30 feet or more!

- A live wire touching the ground causes electricity to fan out in a pool, decreasing in strength as it travels away from the center. A downed line touching a fence or guardrail can energize it for several thousand yards. This poses a danger to anyone coming into contact with these structures.
- Running from a fallen line may cause your legs to bridge current from higher to lower voltage and you may receive a shock. Instead, keep your legs together and shuffle away with both feet on the ground. Shuffle a safe distance (30 feet or more) away from other utility poles.
- If someone is in contact with a fallen line or guardrail, do not try to rescue them because electrical current can travel through them to you. Warn others to stay away and call 911.
- A car touching a downed line will become energized. If a power line falls on your car while you are inside, follow these instructions:
 1. Remain where you are, if possible, and wait for help.
 2. If you must get out of the car because of a fire or some other hazard, jump free of the car, hopping with both feet together so that your body clears the vehicle before touching the ground.
 3. Never step down or simultaneously touch the ground and equipment that is in contact with the power line, as this will increase the risk of electric shock.
 4. Once you clear the car, shuffle at least 30 feet away, with both feet on the ground as described above.

As in all power line related emergencies, call for help immediately by dialing 911 or call your electric utility company's Trouble Line at the number(s) listed in our Reference tab.

Steps to Restore Power Safely After a Storm

After a storm or power outage, the Hawaiian Electric Companies take the following steps to restore power as quickly as possible, with safety as our top priority. Even if you don't see us in your neighborhood, be assured we are working to restore power as quickly as possible. Thank you for your patience as we move through these steps to restore power to everyone.

01

Safety first

The safety of the public and our crews is our top priority. Before proceeding with repairs, we must first address any immediate potential hazards. This includes complying with all environmental rules and ensuring there is no electricity running through affected areas.

02

Damage assessment and clearing

We must determine the extent of damage and any materials/equipment requirements, such as for downed poles and lines. We also must address accessibility issues, including trimming trees, making trails, making helicopter landing or staging pads, removing debris, trenching, draining flooded underground systems, etc.

03

Repair main transmission and substations

If needed, we first repair main transmission lines and substations, which serve as the backbone of the electric system. This step sometimes includes flying in materials, equipment, and personnel.

04

Repair neighborhood circuits

Next, we repair poles, equipment, lines, and/or underground cables in affected neighborhoods. At this stage, we can often incrementally restore large groups of customers by transferring them to an alternate circuit, if available.

05

Repair service lines and restore power to individual customers

Our crews then repair individual service lines so the remaining customers in affected areas can be restored.

06

Full circuit restoration

We then restore the system to its normal condition by switching customers back to their normal circuits. Any customers still out of power at this point should call our Trouble Line at 1-855-304-1212. This is an important way for us to learn about any "pocket" outages, which generally affect smaller pockets of customers. We can then focus on restoring power to those remaining areas.

Electric Shock

There are two classifications of electric shock: low voltage (household) and high voltage (outdoor). If you are with a person who receives an electric shock, call 911 immediately for emergency medical help and follow these instructions:

Low voltage (household)

- Determine if the person is still in contact with the circuit or power source. If they are, assume the circuit is still energized.
- De-energize the circuit or power source by turning off the power at your fuse box or circuit breaker panel.
- If you cannot turn the power off, use a dry piece of wood, dry plastic or wooden broom, or dry leather clothing to separate the victim from the power source.

NOTE: *Never attempt to remove a person from an energized circuit with your bare hands. Electrical current can travel through them to you and you risk becoming a victim yourself.*

- Once the victim is free, check his or her pulse and breathing. If the victim is not breathing and has no heartbeat, start CPR immediately. DO NOT ATTEMPT CPR IF YOU DO NOT KNOW THE CORRECT PROCEDURES.
- If the victim is conscious, keep them seated and calm.
- Ensure that the victim is taken to the hospital for testing and observation.

High voltage (outdoor)

- If a person is in contact with a power line, assume the line is energized and dangerous.
- Do not attempt to free the person from the power line. Electrical current can travel through them to you and you risk becoming a victim yourself.
- Stay clear and warn others to keep away (30 feet or more).
- Call 911 immediately. Then call your electric utility company's Trouble Line at the number(s) listed in our Reference tab.

Excavation Precautions

To prevent an electrical “dig-in” when doing excavation work, determine the approximate location of underground lines in the work area. If you see pad-mounted electrical equipment or handholes near the work area, these are good indicators that underground lines exist. Learn the location of underground power lines as well as the TV cable, gas, and water pipes by calling Hawai'i One Call at 811 or 1-866-423-7287.

- Verification of underground lines should be performed cautiously. Use hand digging methods and “non-metallic” type tools.
- If an underground power line is damaged during excavation, warn others to keep away and call your electric utility company's Trouble Line immediately.
- If an underground power line is damaged when excavating with a backhoe or other mechanical equipment, the operator should remain on the equipment or vehicle until the equipment can be moved and cleared from the power line.
- If the equipment cannot be cleared from the power line, and the operator must get off because of a fire or some other hazard, the operator should jump free of the equipment, landing with both feet together so that the operator's body clears the equipment before touching the ground.
- The operator should never step down or simultaneously touch the ground and equipment that is in contact with the power line, as this will increase the risk of electric shock.
- Once they have cleared the equipment, the operator should shuffle at least 30 feet away with both feet touching the ground.

Vegetation Management

When working on trees that are near power lines, a 10-foot minimum clearance from the lines is required for safety purposes. When setting up ladders and other equipment, everything should be secured so that nothing is in or can accidentally enter this safety zone. Regularly inspect and maintain your tree branches as they can grow into overhead power lines and cause a power outage or safety hazard to anyone that comes into contact with the tree.

- Only professionally trained and certified individuals should trim trees that are touching or in close proximity to power lines. Upon request, Hawaiian Electric staff can assist by de-energizing and lowering your service line.
- Avoid coming into contact with power lines, either directly or indirectly.
- Keep yourself and any ladders, tools, poles, or fruit pickers at least 10 feet away from power lines.
- Do not let children climb a tree that has a power line running through its branches or near its branches.
- Keep items such as antennas, kites, unmanned aircrafts (drones), and metallic balloons away from power lines.
- If you see something caught in a power line, do not try to free it. Call your electric utility company's Trouble Line at the number(s) listed in our Reference tab.
- If someone has received an electric shock from being too close to a power line, call 911 for immediate assistance.

The Hawaiian Electric Companies have a Vegetation Management Division that will, at your request, come out to inspect and trim your trees if they are at risk of coming in contact with an electrical power line. You can request this service by contacting the Vegetation Management Department on O'ahu or your utility's Trouble Line at the number(s) located in the Reference tab.

Circuit Breaker Panels, Fuse Boxes, and Main Breaker Switch Information

Your household controls electric service through a panel or box called a circuit breaker panel or fuse box. Circuit breaker panels or fuse boxes contain breakers or fuses of different capacities.

- Each circuit's capacity is labeled by "amps," which is a unit that measures the amount of an electric current.
- Fuses or circuit breakers are devices that limit the amount of electric current a circuit will carry. They protect the wires and equipment from overheating, which could create fire hazards. They are designed to automatically open or "break" a circuit should the amount of electric current exceed the rated design of the circuit.
- Fuses contain a soft metal filament that melts to break the circuit when too much current flows through them.
- It is important and good practice to label fuses or circuit breakers with the location of the circuit (e.g., bathroom, kitchen, bedroom, etc.). Labeling your devices will aid you in case of a power outage or when you need to turn the power off before doing repair or maintenance work.
- To prevent circuit breakers from sticking or malfunctioning, exercise your breakers once a year by turning them off and on three times.
- The main circuit breaker or main switch is used to cut off power to your entire home. It is usually located near the electric meter on your home, although some circuit breaker panels also contain the main breaker switch.
- In an emergency, such as during an appliance fire or while rescuing a person from household electric shock, cut off the power to your house at the main breaker or switch. However, if it is faster for you to access your circuit breaker panel or your fuse box than the main breaker or switch, turn all the breakers off or unscrew all the fuses to cut off power to the house.

Ground Fault Circuit Interrupter (GFCI) Information

A ground fault circuit interrupter (GFCI) is an inexpensive electrical device that is designed to protect people from severe or fatal electric shocks. Because a GFCI detects ground faults, it can also prevent some electrical fires and reduce the severity of others by interrupting the flow of electric current. GFCIs are recommended in areas where the risk of electric shock is higher, such as near receptacles or water sources.

- The GFCI constantly monitors electricity flowing in a circuit to sense any loss of current to the ground, often times referred to as a “ground fault.” If the current flowing through the circuit differs by a small amount from that returning, this could indicate insulation breakdown and the GFCI quickly switches off power to that circuit. The GFCI interrupts power faster than the blink of an eye to prevent coming into contact with a lethal dose of electricity. You may receive a painful shock, but you should not receive a serious shock injury.
- Look for the Underwriters’ Laboratories (UL) seal on GFCIs when purchasing them or when specifying the product to your licensed electrician to ensure your product meets safety standards. UL is an independent product safety certification organization that certifies products using a UL mark to indicate that the product meets a number of safety requirements and guidelines.

NOTE: “UL Approved” is not a valid term used to refer to a UL Listed, UL Recognized or UL Classified product. To learn more about UL guidelines and valid UL marks, visit www.UL.com.

Three common types of GFCIs are available for home use:

Wall receptacle GFCI

This type of GFCI is the most widely used. It fits into a standard outlet and protects against ground faults whenever an electrical product is plugged into the outlet. Wall receptacle GFCIs are most often installed in kitchens, bath and laundry rooms, and outdoor locations where water and electricity are most likely to be in close proximity. Most receptacle type GFCIs can be installed so that they also protect other electric outlets farther “downstream” in the branch circuit.

Circuit Breaker GFCI

In homes equipped with circuit breakers, this type of GFCI may be installed in a panel box to give protection to selected circuits. The circuit breaker GFCI serves a dual purpose: not only will it shut off electricity in the event of a ground fault, but it will also trip when a short circuit or an overload occurs. Protection covers the wiring and each outlet, lighting fixture, heater, etc., served by the branch circuit in the panel box.

Portable GFCI

Where permanent GFCIs are not practical, portable GFCIs may be used. One type contains the GFCI circuitry in a self-contained enclosure with plug blades in the back and receptacle slots in the front. It can be plugged into a receptacle, and the electrical product is then plugged into the GFCI. Another type of portable GFCI is an extension cord combined with a GFCI. It adds flexibility in using receptacles that are not protected by GFCIs.

Portable GFCIs should only be used on a temporary basis and should be tested prior to every use.

Using GFCIs

GFCIs should be used anywhere a receptacle and a water source are present, such as in kitchens, bathrooms, garages and carports, utility or laundry rooms, workshops, outdoor locations, pool and whirlpool spa areas, decks, and porches.

In homes that are built to comply with the National Electrical Code (the Code), GFCI protection is required for most outdoor receptacles (since 1973), bathroom receptacle circuits (since 1975), garage wall outlets (since 1978), kitchen receptacles (since 1987), and all receptacles in crawl spaces and unfinished basements (since 1990). Consider having GFCIs installed if you own a home that does not have GFCIs currently installed in those critical areas specified in the latest version of the Code.

For broad protection, GFCI circuit breakers may be added in many panels of older homes to replace ordinary circuit breakers. For homes protected by fuses, install wall receptacle or portable GFCIs in areas of greatest exposure, such as the bathroom, kitchen, basement, garage, and outdoor circuits. A GFCI should be used whenever operating electrically powered garden equipment (mower, hedge trimmer, edger, etc.) and tools (drills, saws, sanders, etc.).

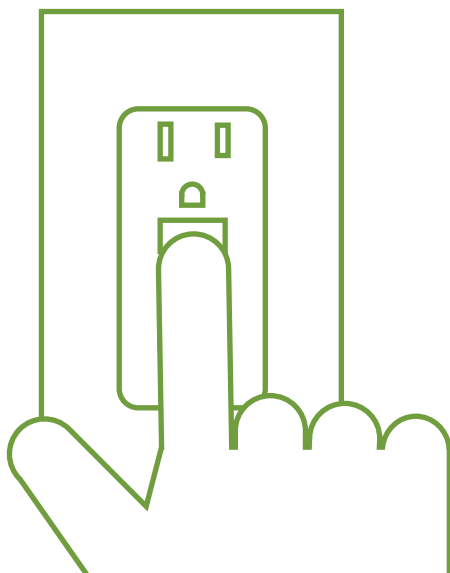
Use a licensed electrician to install circuit breaker and wall receptacle GFCIs in your home. The portable GFCI requires no special knowledge or equipment to install. It is important to follow the manufacturer's installation instructions for all types of GFCIs to ensure proper functioning, especially when protecting other outlets downstream in the branch circuit.

GFCIs should be tested after installation to make sure they are working properly. Like all products, GFCIs can be damaged over time. GFCIs damaged by lightning or electrical surges may fail to provide adequate protection. Test circuit breaker and wall receptacle GFCIs monthly and after violent thunderstorms. Test portable GFCIs before each use.

Testing GFCI devices

Follow these steps to properly test GFCIs in your home:

1. Push the "RESET" button located on the GFCI receptacle to assure normal GFCI operation.
2. Plug a nightlight with an "ON/OFF" switch or other product such as a lamp into the GFCI receptacle and turn the product on.
3. Push the "TEST" button located on the GFCI receptacle. The nightlight or other product should turn off.
4. Push the "RESET" button. The light or other product should turn on again. If the light or other product remains on when the "TEST" button is pushed, the GFCI is not working properly or has been incorrectly installed. If your GFCI is not working properly, call a licensed electrician who can assess the situation, rewire the GFCI if necessary, or replace the device.



Power Outage Information

As your electric utility company, we understand that no one likes a power outage. It can cause inconvenience in your normal daily life. We are continuously striving to improve our system and equipment to minimize power outages, but there will always be uncontrollable situations in which a power outage can occur.

Here are some reasons why your lights may go out:

Natural disasters

- Tropical storms and hurricanes
- Torrential rains
- High winds
- Storm surge (high surf)
- Tsunamis
- Thunderstorms (lightning)
- Earthquakes
- Volcanic eruptions
- Mud slides
- Land slides

Objects coming in contact with overhead power lines and other electrical equipment

- Trees and branches
- Drones, kites, balloons*
- Heavy equipment such as cranes
- Humans and animals
- Damage to overhead transformers**

*Never fly kites, balloons, or drones near overhead power lines. Use weights on metallic and latex balloons so they don't get loose and entangled in overhead power lines.

**Never shoot or throw anything at insulators or transformers.

Utility pole damage

- Vehicle accidents
- Termites, rot, corrosion

Damage to underground cables or equipment

- Flooding in the cable vault
- Excavation work that results in accidental "dig-ins" (damage) to underground cables
- Damage to pad-mounted transformers
- Cable faults

Troubleshooting

- Temporarily switching or rerouting power around a problem onto a different circuit to avoid a power outage or serious damage to the power lines and other electrical equipment

Electric power generation problems

- Rolling blackouts
- Lack of generation capacity
- Generation problems at the power plants of independent power producers
- Unscheduled or extended repair and maintenance to utility generators

Other reasons

- Equipment theft and/or damage*
- Scheduled maintenance and upgrading of electrical equipment
- Electric system additions or removals
- Fires
- Electrical equipment failures
- Flashovers/contamination (e.g., dust, salt) on insulators
- Transformer overloads
- Overloading on a customer's household circuit

*Report energy theft and break-ins to electric utility substations and transformers by calling 911 or your electric utility's Trouble Line at the number(s) located in the Reference tab.

Elevator safety

If you are trapped in an elevator during a power outage, follow these safety instructions:

- Relax and stay calm until help arrives.
- Use any available emergency communication system in the elevator, such as an alarm button, a two-way speaker system, a built-in emergency telephone, or your mobile phone to communicate where you are and who is with you.
- DO NOT try to force open the elevator doors.
- Never try to exit a stalled elevator car — it is extremely dangerous. Always wait for trained and qualified emergency personnel.
- Never attempt to leave the elevator if it is stopped between floors unless specifically instructed by trained and qualified personnel.

Generator safety

Generators are intended to supply power to only a few household appliances. Before using a portable generator, be sure to read and follow the manufacturer's instructions. Take precautions to avoid poisoning from the generator's toxic exhaust and to prevent electric shock, electrocution, and fire.

- Generator exhaust contains carbon monoxide, a poison you cannot see or smell. That's why you should never use a generator inside a home, basement, or garage. Only use the generator outside, away from your home's windows, doors, and vents.
- Never plug a portable generator's power into a household outlet because electricity can backflow into utility lines, creating a safety hazard for utility staff working on them.
- Protect the generator from moisture and set it on a dry surface where water cannot reach it or puddle under it. Make sure your hands are dry before touching the generator.
- Always start or stop a generator when no electric appliances, tools, or lights are connected to it.
- Connect appliances to the generator using a heavy-duty extension cord that is designed for outdoor use. Check the cord to be sure there are no cuts or tears and protect it from getting pinched if it passes through a window or doorway.
- Check the combined wattage of all the appliances you plan to power with the generator. Make sure the combined wattage of the appliances does not exceed the generator's capacity or the capacity of the extension cord they are plugged into.
- Before refueling the generator, turn it off and let it cool down. Never overfill the fuel tank. Clean off any spilled gasoline.
- Store reserve fuel outside your home's living areas and away from any fuel-burning appliances.

An auxiliary power generation system may only be safely connected to the house wiring using an approved power transfer switch. The transfer switch must be installed by a qualified electrician in accordance with the National Electrical Code and applicable state and local electrical codes. For information and to submit electrical plans for our review, call your electrical utility's Customer Installation Department at the number located in the Reference tab.

Momentary power interruptions

We all regularly use electronic equipment that is sensitive to even a split-second loss or change in electric power. On any given day, momentary power interruptions and power fluctuations (power surges or power sags) may occur. These conditions can be caused by utility switching (when the electric utility attempts to isolate a problem in order to maintain power to an area), weather (lightning, wind), damage to the electric utility's equipment, or even the start-up of major appliances like refrigerators or air conditioners.

Power spike/surge/transient (too much voltage): A sudden upward change in voltage. Although such spikes and surges last only a few milliseconds, they can cause serious damage to computers and other sensitive electronic equipment.

Power sag (not enough voltage): A planned or accidental loss of power, which can cause your appliances, lights, and electronic equipment to trip off and your PC hard drive to crash. A drop in voltage usually lasts only a few seconds, and most equipment will not be damaged by a power sag. However, motorized appliances such as air conditioners and refrigerators may be affected.

Important: You have a responsibility to protect your equipment from power interruptions and power fluctuations. The rules of Hawaiian Electric's tariff, approved by the Public Utilities Commission, say that customers should equip their motors and electronic equipment with devices to protect them from power interruptions and power fluctuations.

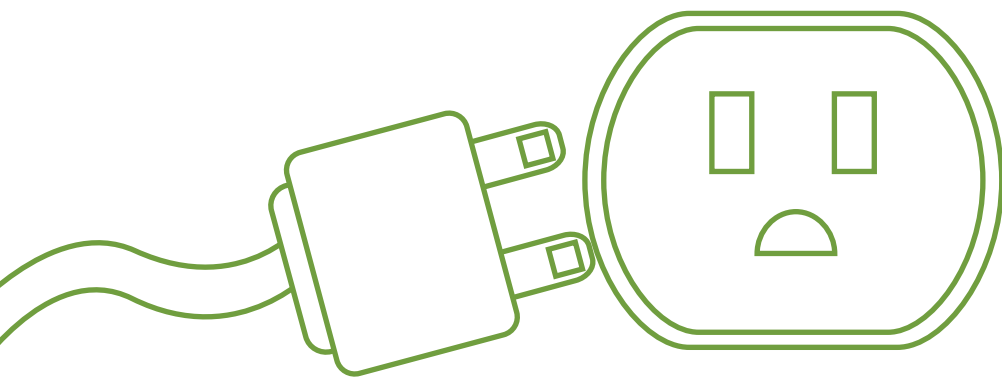
- Buy equipment that is already protected from potential power problems. Some manufacturers provide back-up power features in products. Check if the equipment includes a display carry-over feature or a battery backup. This eliminates blinking digital displays on microwaves, VCRs, and radio alarm clocks.
- Install plug-in surge suppressors, which can provide limited protection against high voltage spikes by redirecting energy associated with over-voltage. Surge suppressors can be purchased at most hardware and electronic supply stores.

NOTE: *Not all power strips are surge suppressors.*

Protect sensitive equipment during anticipated power interruptions and power fluctuations due to storms, disasters, and rolling blackouts:

- During a storm or hurricane situation, especially when power outages have already occurred, turn off and unplug all unnecessary appliances or equipment (e.g., computers, TVs, air conditioners, etc.). Most electronic equipment is partially on even when turned off, so electronics should be unplugged to avoid possible damage. When the power comes back on and is steady (no fluctuations or momentary outages), gradually plug in appliances one at a time.
- Generally, your telephone and cell phone service will not be affected by a power outage. However, cordless telephones rely on electric power to operate their transmitters and to recharge their batteries. Keep calls to a minimum and less than a minute if possible, or send text messages, which use less bandwidth. This is to avoid telephone gridlock and to keep lines open for emergency calls.

NOTE: *Overloading circuits reduces the efficiency of the entire telephone system. During major disasters (hurricanes, tsunamis, etc.) you will be requested by the telephone company and the Emergency Management agencies to limit your calls to emergencies only.*



Minimizing the use of electric power after an outage

It is generally safe to use your appliances after an isolated power outage, but you may experience momentary power interruptions. However, after a major, island-wide power outage, you can help your electric utility company speed up its efforts to restore service to all customers by turning on only those appliances that are necessary.

In most cases, the refrigerator/ freezer is the one appliance needed most. Avoid turning on the water heater, range, air conditioner, pool pump, hot tub or spa, clothes washer, clothes dryer, or the dishwasher until they are needed. Then, turn them on one at a time.

Filing a Claim With Your Electric Utility Company

Power outages during a storm or hurricane are sometimes unavoidable. Equipment and property damage due to loss of power during storm conditions are usually not reimbursable by the electric utility company.

However, if you feel there are circumstances for which you are entitled to a reimbursement, you can send a letter with the necessary information to the appropriate utility company. You may also call the Claims department at the appropriate utility company and a representative will discuss the information needed to review your claim. For a claim to be valid with the Hawaiian Electric Companies, it must be filed within 30 days of the interruption of service. See the Reference tab for your electric utility's Claims department contact information.

04

Food and Water Safety

Emergency Water Storage

Water Use and Safety

Ways to Sanitize Water

- Boiling
- Disinfecting
- Distillation

Using Water from an Outdoor Source

Emergency Food Storage

Food Safety Tips

- Ice and dry ice

Food Recommendations

Sample Recipes

Three-Day Sample Family Menu

Supplies for Preparing Meals

Emergency Water Storage

During a major power outage the Board of Water Supply and/or your county's water utility company may not have the power to pump water to your home. You should have enough water to last your family for at least 14 days.



When an emergency is imminent, fill the tub, washing machine, and all other available containers with water for sanitary needs.

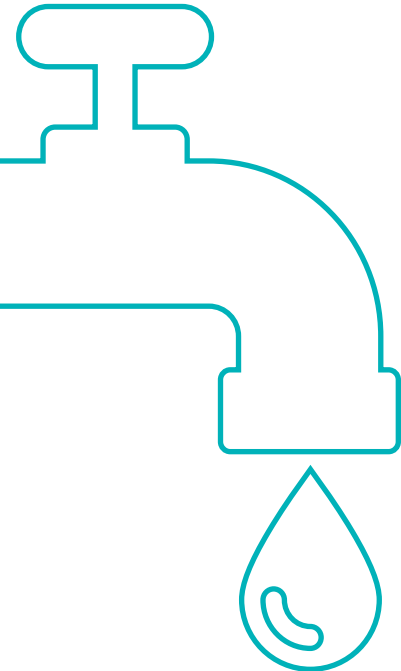
- Have a minimum of one gallon of water per person per day for drinking, cooking, washing and sanitation. Include pets in your calculations.
- Use clean containers for drinking water. Do not use containers that stored food with strong odors (mayonnaise, pickles, etc.) as the water will pick up the odor during storage.
- Disinfect containers. Wash containers thoroughly, then rinse in a mild bleach solution (one capful of liquid bleach to one gallon of water), and then rinse thoroughly.
- Fill the container to the top with water from the tap, keeping a minimal amount of air between the water and the cap. To ensure the water is safe to drink, add one drop of mild liquid bleach per gallon of water. Cap and store in a cool, dark place.
- Containers should be rotated periodically. If feasible, replace stored water at least every four weeks. Discard water on plants or the lawn. Wash the containers and refill them with clean water. If you notice that the stored water is cloudy, or has an odor, discard it and refill containers as necessary.

For more information on how to prepare for a water emergency, visit the Board of Water Supply's website at www.boardofwatersupply.com/emergencypreparedness.

Water Use And Safety

During a major power outage, it is essential that residents use water sparingly — for drinking and sanitation purposes only. The Board of Water Supply may not have the power needed to pump water to your home. If you live in a high-rise, your building's pumps may be out of service (check with your building supervisor). Under these circumstances, special attention needs to be given to the use of water.

- Listen to the radio for Emergency Management reports that mention the need to limit water use in your area. You may need to use water stored for emergency use, taking the precautions mentioned, or purchase commercially bottled water for cooking and drinking.
- Do not bathe in streams; the Department of Health recommends against it because of the danger of contracting diseases due to contaminated water.
- Keep the flushing of toilets to a minimum. If the power is out, there is a good chance the sewer system is without its main power source.
- Do not use potable water to try to fill your toilet as it may result in waste overflowing back. Instead, line your empty toilet bowl with a heavy-duty trash bag before use, adding baking soda or cat litter to absorb odors.



Ways To Sanitize Water

Boiling

Boiling is the safest method for treating water:

1. Fill a large pot with water from the tap.
2. Let any suspended particles settle to the bottom or strain the water through cheesecloth, a sheet, a coffee filter, or other clean, porous material to remove as many solids as you can before treating the water.
3. Bring the water to a vigorous boil and keep it boiling for at least 5 minutes.
4. Pour the water back and forth between two clean pots. This will help it cool and will also add air to the water to make it taste better.

Disinfecting

Use household liquid bleach to kill microorganisms:

1. Add 16 drops (about 1/4 teaspoon) of liquid chlorine bleach (5.25% hypochlorite as its only active ingredient) for each gallon of water.
2. Stir and let the water stand for 30 minutes. If it gives off a slight chlorine smell and looks clear, it is safe to use. DO NOT use scented bleach, color-safe bleach or bleaches with added cleaners.
3. If you do not smell chlorine, or if the water is still cloudy, do not use it for drinking or cooking.

Distillation

Distillation involves boiling water and then collecting the vapor that condenses back to water which takes out salt and other impurities:

1. Using clean containers, fill a pot halfway with water.
2. Tie a cup to the handle of the lid of the pot so that the cup will hang right side up when the lid is upside down (make sure the cup is not submerged into the water).
3. Cover the pot and boil the water for 20 minutes. Be sure to take precautions to avoid accidental burns from hot steam and water.

The water that drips from the lid into the cup is distilled.

Please consult the Board of Water Supply's website at www.boardofwatersupply.com/emergencypreparedness for additional information on emergency water preparedness.

Using Water From An Outdoor Source

- Treating and/or drinking water from streams, rivers, ponds, or any other outdoor source is not recommended. These sources can contain heavy metals, industrial pollutants, bacteria, and viruses that will require extensive treatment to make the water safe to drink.
- If there is floating material in the water or it has a funny odor or dark color, avoid using it.
- Use saltwater only if you distill it first.
- You should treat all water of uncertain purity before using it for drinking, food preparation, or hygiene.
- DO NOT DRINK FLOODWATER AS IT MAY HAVE TOXIC POLLUTANTS IN IT.

Emergency Food Storage

Always have an emergency food supply that will last at least 14 days for each individual in the household. Remember to pack foods for persons with special dietary needs and follow emergency food storage tips:

- Keep canned foods in a cool, dry place.
- Protect packaged food in tightly closed cans or metal containers.
- Select foods with a shelf life of at least six months, but preferably one year or more.
- Use canned foods that do not require cooking, water, or special preparation.
- Date and rotate food supplies by using the oldest foods first.

NOTE: *Replace regularly with a new supply.*

Food Safety Tips

The Hawai'i Department of Health has written the "Emergency Handbook for Food Establishments," which focuses on food safety. Please visit <http://health.hawaii.gov/san/food-information/> to view and download the handbook. Below are additional food safety recommendations:

- Food should be safe as long as power is out no more than four hours. Keep the refrigerator and freezer doors closed as much as possible.

- Use a food thermometer to check the temperature of perishable foods (such as meat, poultry, fish, eggs, and leftovers) right before you cook or eat it. If the food is 41°F or colder, it is safe to eat. Discard any perishable food that has been above 41°F for over two hours. Always discard any items in the refrigerator that have come into contact with raw meat juices.
- Foods will keep frozen in the freezer for approximately 48 hours for a fully stocked freezer and about 24 hours for a half-full freezer.

Foods will remain frozen longer if:

- The freezer door remains closed.
- The freezer is full or nearly full — the less crowded the freezer, the shorter the time the food will remain frozen.
- The outside air temperature is cool.
- The freezer is large and well-insulated — small freezers do not keep foods frozen as long.
- The food has higher water content (meats, soups, seafood, etc.)

NOTE: *Food that has thawed completely and has not been held at or below 41°F should be cooked and eaten immediately. If your food still has ice crystals, it is safe to refreeze (if power is restored).*

If power is out for an extended amount of time, consider transferring your food to a freezer that is still powered (such as a friend's freezer). Use dry ice if available and remember to remove the dry ice from the freezer once the power is restored.

Spoiled food may have off colors or unusual odors. However, food poisoning and food spoilage are caused by different bacteria. Food that has become tainted by food poisoning bacteria cannot be detected by sight, smell, touch, or taste. Do not taste questionable food. When in doubt, throw it out.

For more information on food safety, visit
<http://health.hawaii.gov/san/food-information/>

Ice and dry ice

Have a few frozen ice packs to help keep perishable items cold during unexpected power outages. When you know a power outage may occur, freeze ice packs and large blocks of ice (in rinsed out milk cartons or similar containers) before the power goes out.

Dry ice can help keep perishable items cold during a power outage. When handling dry ice, follow these safety tips:

Safe handling

- Do not touch dry ice with your skin, as it can cause severe frostbite. Dry ice temperature is extremely cold (about -215°F).
- Always handle dry ice with care using tongs, insulated (thick) gloves, an oven mitt, or a towel. If you suspect you have frostbite, seek medical help immediately.
- Never eat or swallow dry ice. If you swallow dry ice, seek medical help immediately.
- Do not place dry ice directly on countertops. The cold temperature could cause the surface to crack.

Storing dry ice

- Do not store dry ice in an airtight container. The sublimation (vaporization) of dry ice to carbon dioxide gas will cause an airtight container to expand or possibly explode. The best place to store dry ice is in a Styrofoam chest with a loose fitting lid.
- Do not store dry ice in your refrigerator-freezer when it is on. The extremely cold temperature will cause the thermostat to turn off the freezer.

Ventilating dry ice

- Never place dry ice in an unventilated room or car. If you are traveling with dry ice in the car or if you are in a small room with dry ice in it, leave a window slightly open to prevent carbon dioxide gas build up.
- The sublimated carbon dioxide gas will sink to low areas and replace oxygenated air. This could cause suffocation if breathed exclusively. Leave the area immediately if you start to pant or have difficulty catching your breath, or if your fingernails or lips start to turn blue. This is a sign that you have inhaled too much carbon dioxide gas and not enough oxygen.
- Never lie down in, or place small children or pets in homemade “clouds” created with the sublimation of dry ice. These clouds are made of carbon dioxide gas — people and pets could suffocate if they breathe in too much carbon dioxide gas.

Disposing dry ice

- To dispose of dry ice, place it in a well-ventilated container outdoors and out of reach from children and pets, and allow it to sublimate.

Food Recommendations

Food supplies may become scarce after an emergency due to damage caused to supplies, delays in shipping, and other accessibility issues. A non-perishable food supply of 14 days per person is highly recommended to have on hand in case food supplies are inaccessible. Include foods that are high in calories and rich in nutrition.

In times of emergencies, resources may be limited, so keep a supply of foods that require little to no special preparation or cooking. If possible, have at least a protein, grain, and vegetable or fruit per meal. Please see our sample menu for ideas on simple ways to balance your nutritional needs throughout the day.

Protein	Grains
Canned luncheon meat Vienna sausage Corned beef Corned beef hash Deviled ham Chunked chicken Tuna Pink salmon Canned beans Assorted soups Canned beef stew Chili with beans Pork and beans Peanut butter	Rice Dry pasta Cereal Hot cereal Soda crackers Granola/energy bar
Vegetables and fruit	Other recommendations
Canned fruits Canned vegetables Fruit juices Raisins	Non-fat dry milk Sugar Jelly Instant orange drink Instant coffee/tea/cocoa Non-dairy creamer Salt/pepper Mustard Ketchup Canned soft drinks

Sample Recipes

Black Bean and Corn Medley

- 1 (15-ounce) can black beans, drained
- 1 (15-ounce) can corn, drained
- 1 (15-ounce) can diced tomatoes, drained
- 2 tablespoons vinegar
- 1/4 cup olive oil
- 1 teaspoon each pepper, garlic powder, onion powder and cumin
- Dash of chili powder (optional)
- Baked tortilla chips

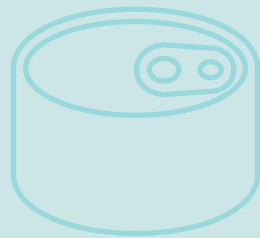
In a large bowl, mix black beans, corn and tomatoes. Add vinegar, olive oil, pepper, garlic and onion powders, and cumin into the bowl. Mix thoroughly. Top medley with baked tortilla chips. Serves 4.



Five-Can Chili

- 1 (15-ounce) can chili with beans
- 1 (14.5-ounce) can mixed vegetables, drained
- 1 (11-ounce) can whole kernel corn, drained
- 1 (10.75-ounce) can condensed tomato soup, undiluted
- 1 (10-ounce) can diced tomatoes and green chilies

In a saucepan, combine all ingredients. Heat through. Serve with crackers, bread, or over pasta. Serves 6.



Baby Food: Ensure your emergency food supply includes items to meet your baby's nutritional needs for at least 14 days. Formula, baby foods, and non-perishable snacks should be accounted for based on your child's age and size and can vary based on your child's eating habits.

Three-Day Sample Family Menu

Day	Breakfast	Lunch	Dinner
Day 1	Vienna sausage Cold cereal Non-fat dry milk Canned fruits Instant orange drink	Corned beef Soda crackers Canned vegetables Fruit juice	Canned luncheon meat Rice Black Bean and Corn Medley Instant tea
Day 2	Peanut butter Granola bar Canned fruits Instant coffee	Pork and beans Rice Canned vegetables Fruit juice	Five-Can Chili Dry pasta Canned vegetables Instant orange drink
Day 3	Corned beef hash Hot cereal Non-fat dry milk Raisins Fruit juice	Tuna Soda crackers Canned vegetables Instant orange drink	Canned beef stew Rice Canned vegetables Instant tea

Supplies For Preparing Meals

Make sure you have the following supplies necessary for preparing emergency meals:

- Disposable plates, bowls, forks, spoons, knives
- Disposable hot and cold cups
- Paper napkins or towels
- Bottle opener and manual can opener
- Trash bags
- Camp stove or canned heat stove and enough fuel for 14 days, or hibachi and charcoal
- A supply of matches or a lighter in a waterproof container
- Heavy-duty aluminum foil
- Plastic storage bags

05

Planning and References

Communication Plan

Evacuation Plan

References

O'ahu
Maui, Moloka'i, Lāna'i
Hawai'i (Big Island)
Kaua'i

Public Emergency Alerts

Information and Resources

Communication Plan

Have your family's communication plan ready to help members of your household reconnect after an emergency. It should include information on the multiple ways you can contact one another in case communication networks are congested, unreliable, or unavailable. Remember to include information on any additional communication requirements for family members with disabilities, access or functional needs.



NOTE: In an emergency, use the power of social media to share information quickly. Post to Facebook, Twitter, or other accounts to communicate to your network that you are safe.

Fill in your communication plan below:

Personal Information

Name: _____ Mobile #: _____

Other # or social media name: _____

Email: _____

Important medical or other information: _____

Emergency Family Contact

Name: _____ Mobile #: _____

Home #: _____ Email: _____

Address: _____

Out-of-State Contact:

Name: _____ Mobile #: _____

Home #: _____ Email: _____

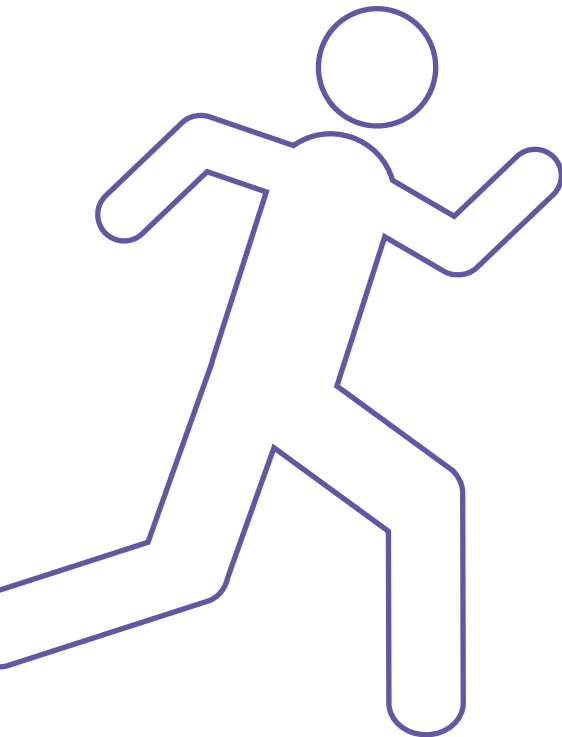
Address: _____

Evacuation Plan

Consider what actions you and your family will take if an emergency forces you to leave your home. Develop an evacuation plan with meeting places, evacuation routes, and safe shelter options for each specific disaster that could happen, and practice to prevent confusion during an emergency. Discuss how you will reconnect if you become separated and other communication methods are compromised.

Remember to practice the following tips to for a safe evacuation:

- Always follow the instructions of local officials.
- Be familiar with alternate routes and other means of transportation out of your area. Remember that your evacuation route may be on foot depending on the type of disaster.
- Establish meeting places that are familiar and easy to find.
- If you have family pets, identify pet-friendly shelters or other accommodations.



Fill in your evacuation plan below:

Meeting Places

Neighborhood meeting location:

Notes: _____

Out-of-neighborhood meeting location:

Address: _____

Notes: _____

Out-of-town meeting location:

Address: _____

Notes: _____

Notes:

References

O‘ahu

American Red Cross (State Chapter) 734-2101
Hours: Monday–Friday, 8 a.m.–4:30 p.m.

Board of Water Supply
Trouble Line 748-5000
Hours: 24 hours a day, 7 days a week

City and County of Honolulu
Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.
Address: 650 South King Street, Honolulu, HI 96813
Department of Emergency Management 723-8960
TTY Service 723-8966
Customer Service Main Line 768-9311
Environmental Services Customer Service Line 768-3330

Department of Health 586-8000
(For food safety questions)
Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.

Disability and Communication Access Board (DCAB) 586-8121
Emergency preparedness for people with disabilities
<http://health.hawaii.gov/dcab/community-resources/emergency/>

Emergency Calls
Police, Fire, Ambulance 911

Hawai‘i Emergency Management Agency 733-4300
Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.

Hawai‘i Gas (O‘ahu)
Customer Service Office 535-5933
Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Emergency Dispatch Office 526-0066
Hours: 24 hours a day, 7 days a week

Hawai'i One Call Center811 or 1-866-423-7287
 (To request marking of underground lines in and around your property prior to excavation work)
Hours: 24 hours a day, 7 days a week

Hawaiian Electric (O'ahu)
 Customer Service Office 548-7311
Hours: Monday–Friday, 7:30 a.m.–6 p.m., Saturday, 7:30 a.m.–4 p.m.

Claims Department 543-4624
Hours: Monday–Friday, 7:30 a.m.–4 p.m.
Address: PO Box 2750, Honolulu, HI 96840-0001

Education & Consumer Affairs Department 543-7511
Hours: Monday–Friday, 7:30 a.m.–4 p.m.

Vegetation Management Department 543-7836
Hours: Monday–Friday, 7:30 a.m.–4 p.m.
Email: trimrequest@hawaiianelectric.com

Trouble Line (toll free) 1-855-304-1212
 (To report power outages, downed power lines, or trees on power lines)
Hours: 24 hours a day, 7 days a week

Hawaiian Telcom
 24-Hour Customer Care Office 643-6111 or 611
Hours: 24 hours a day, 7 days a week

Streetlight Outage
 Street Lighting Customer Service 768-5300
 O'ahu Highway Division 831-6714
 O'ahu Highway Division After Hours 485-6200

National Flood Insurance Program (NFIP) Key Contacts
 NFIP Call Center 1-800-621-3362
Hours: Monday–Friday, 8 a.m.–6 p.m. CT

FEMA Map Information Exchange 1-877-336-2627
Hours: Monday–Friday, 8 a.m.–6:30 p.m. ET

USDA Food Safety and Inspection Service

Meat and Poultry Hotline 1-888-674-6854
(For food safety questions)
Hours: Monday–Friday, 10 a.m.–4 p.m. ET
24/7 Food Safety Automated Response System: ask.usda.gov
Email: askusda@usda.gov

Maui, Molokaʻi, Lānaʻi

American Red Cross (Maui County) 244-0051
ask.usda.gov

Department of Health 984-8230
(For food safety questions)
Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.

Department of Water Supply (Maui, Molokaʻi)
Trouble Line 270-7633
Hours: 24 hours a day, 7 days a week

Emergency Calls
Police, Fire, Ambulance..... 911

Hawaiʻi Gas (Maui)
Customer Service Office 877-6557
Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Customer Service Office (Lānaʻi) 1-800-828-9359
Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Customer Service Office (Molokaʻi)..... 1-800-828-9359
Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Emergency Dispatch Office 526-0066
Hours: 24 hours a day, 7 days a week

Hawaiʻi One Call Center 811 or 1-866-423-7287
(To request marking of underground lines in and around your property prior to excavation work)
Hours: 24 hours a day, 7 days a week

Hawaiian Telcom

24-Hour Customer Care Office..... 643-6111 or 611
Hours: 24 hours a day, 7 days a week

Lānaʻi Water Company..... 565-3352

Hours: Monday–Friday, 7 a.m.–3:30 p.m.

After Hours 559-3352

Maui County Emergency Management Agency

Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.

Address: 200 South High Street, Wailuku, HI 96793

Maui Office 270-7285

After Hours (Maui Police Dispatch) 244-6400

Molokaʻi 553-9060

After Hours (Molokaʻi Police Dispatch)..... 553-5355

Lānaʻi 565-7479

After Hours (Lānaʻi Police Dispatch) 565-6428

Hawaiian Electric (Maui)

Claims Department 871-7777

Hours: Monday–Friday, 7:30 a.m.–4 p.m.

Molokaʻi and Lānaʻi (toll free)..... 1-877-871-8461

Address: PO Box 398, Kahului, HI 96733-6898

Customer Education 871-2304

Hours: Monday–Friday, 7 a.m.–4 p.m.

Customer Service Office

Hours: Monday–Friday, 8 a.m.–5 p.m.

Maui Office 871-9777

Molokaʻi and Lānaʻi (toll free)..... 1-877-871-8461

Trouble Line

(To report power outages, downed power lines, trees on power lines, or street lights out)

Hours: 24 hours a day, 7 days a week

Maui Office 871-7777

Molokaʻi and Lānaʻi (toll free)..... 1-877-871-8461

National Flood Insurance Program (NFIP) Key Contacts

NFIP Call Center 1-800-621-3362
Hours: Monday–Friday, 8 a.m.–6 p.m. CT

FEMA Map Information Exchange..... 1-877-336-2627
Hours: Monday–Friday, 8 a.m.–6:30 p.m. ET

USDA Food Safety and Inspection Service

Meat and Poultry Hotline 1-888-674-6854
(For food safety questions)
Hours: Monday–Friday, 10 a.m.–4 p.m. ET
24/7 Food Safety Automated Response System: AskKaren.gov
Email: mphotline.fsis@fsis.usda.gov

Hawai‘i (Big Island)

American Red Cross (Hawai‘i County) 935-8305
Hours: Monday–Friday, 8 a.m.–4 p.m.

Department of Health

(For questions about food safety)
Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.
Hilo Office 933-0917
Kona Office..... 322-1507

Department of Water Supply

Trouble Line 961-8790
Hours: 24 hours a day, 7 days a week

Emergency Calls

Police, Fire, Ambulance..... 911

Hawai‘i County Civil Defense Agency 935-0031

Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.
Address: 920 Ululani Street, Hilo, HI 96720
After Hours (Hawai‘i Police Dispatch) 935-3311

Hawaiian Electric (Hawai'i)

Claims Department..... 969-0279

Hours: Monday–Friday, 7:30 a.m.–3:30 p.m.

Address: PO Box 1027, Hilo, HI 96721

Customer Service Office

Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Hilo Office 969-6999

Kona Office..... 329-3584

Community Outreach Division

Hours: Monday–Friday, 7:30 a.m.–3:30 p.m.

Hilo Office 969-0137

Trouble Line 969-6666

(To report power outages, downed power lines, or trees on power lines)

Hours: 24 hours a day, 7 days a week

Hawai'i Gas

Customer Service Office (Hilo) 935-0021

Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Customer Service Office (Kona)..... 329-2984

Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Emergency Dispatch Office 526-0066

Hours: 24 hours a day, 7 days a week

Hawai'i One Call Center 811 or 1-866-423-7287

(To request marking of underground lines in and around your property prior to excavation work)

Hours: 24 hours a day, 7 days a week

Hawaii Wildfire Mitigation Office 885-0900

Hawaiian Telcom

24-Hour Customer Care Office..... 643-6111 or 611

Hours: 24 hours a day, 7 days a week

Streetlight Outage

Hawai'i County Traffic Division 961-8341

Hours: Monday–Friday, 7 a.m.–3:30 p.m.

After Hours (Hawai'i Police Dispatch) 935-3311

National Flood Insurance Program (NFIP) Key Contacts

NFIP Call Center 1-800-621-3362
Hours: Monday–Friday, 8 a.m.–6 p.m. CT

FEMA Map Information Exchange..... 1-877-336-2627
Hours: Monday–Friday, 8 a.m.–6:30 p.m. ET

USDA Food Safety and Inspection Service

Meat and Poultry Hotline 1-888-674-6854
(For food safety questions)
Hours: Monday–Friday, 10 a.m.–4 p.m. ET
24/7 Food Safety Automated Response System: AskKaren.gov
Email: mphotline.fsis@fsis.usda.gov

Kaua’i

American Red Cross (Kaua’i) 245-4919
Hours: Monday–Friday, 8 a.m.–4 p.m.

Department of Health..... 241-3323
(For food safety questions)
Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.

Department of Water..... 245-5400
Hours: Monday–Friday, 6 a.m.–2:30 p.m. (October–March)
Monday–Friday, 6:30 a.m.–3 p.m. (April–September)
Trouble Line 245-5444
After Hours (Kaua’i Police Dispatch)..... 241-1711

Emergency Calls
Police, Fire, Ambulance..... 911

Hawai’i Gas
Customer Service Office 245-3301
Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Emergency Dispatch Office 526-0066
Hours: 24 hours a day, 7 days a week

Hawai'i One Call Center811 or 1-866-423-7287
 (To request marking of underground lines in and around your property prior to excavation work)
Hours: 24 hours a day, 7 days a week

Hawaiian Telcom
 24-Hour Customer Care Office 643-6111 or 611
Hours: 24 hours a day, 7 days a week

Kaua'i Emergency Management Agency 241-1800
Hours: Monday–Friday, 7:45 a.m.–4:30 p.m.
Address: 3990 Kaana Street, Suite 100, Līhu'e, HI 96766
 After Hours (Kaua'i Police Dispatch) 241-1711

Kaua'i Island Utility Cooperative (KIUC)
 Customer Service Office 246-4300
 (For emergencies, power interruptions)
Hours: Monday–Friday, 7:30 a.m.–4:30 p.m.

Trouble Line (After Hours) 246-8200

National Flood Insurance Program (NFIP) Key Contacts
 NFIP Call Center 1-800-621-3362
Hours: Monday–Friday, 8 a.m.–6 p.m. CT

FEMA Map Information Exchange 1-877-336-2627
Hours: Monday–Friday, 8 a.m.–6:30 p.m. ET

USDA Food Safety and Inspection Service
 Meat and Poultry Hotline 1-888-674-6854
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24/7 Food Safety Automated Response System: AskKaren.gov
Email: mphotline.fsis@fsis.usda.gov

Public Emergency Alerts

You may be alerted to an emergency by the sounding of the State of Hawai'i Emergency Management Agency (HI-EMA) outdoor warning sirens. When you hear the sirens, tune to any local radio or television station for emergency information and instructions.

Monitor your local news, radio, or online resources during an emergency to determine exactly which shelters will be open.

Evacuation instructions may be issued over the Emergency Alert System (EAS) via television and radio.

The following emergency broadcast radio stations have been identified by the City and County of Honolulu Department of Emergency Management, Maui County Emergency Management Agency, and Hawai'i Civil Defense. They include but are not limited to the following:

- KSSK AM 590 / FM 92.3
- KRTR 96.3 FM
- KZOO AM 1210 (Japanese language station)
- KREA AM 1540 (Korean language station)
- KNDI AM 1270 (Multicultural language station to include Ilocano, Tagalog, Spanish, Cantonese, Mandarin, Laotian, Okinawan, Vietnamese, Samoan, Tongan Marshallese, Chuukese, Pohnpeian, and English)

Additional radio stations by county:

Maui

- KMVI AM 550 / FM 98.3
- KNUI AM 900 / FM 99.9
- KAOI AM 1110 / FM 95.1 / FM 96.7
- KLHI FM 101.1
- KPOA FM 93.5
- KMMK FM 102.3
- KDLX FM 94.3
- KNUQ FM 103.3 or 103.7
- KONI FM 104.7
- KPMW FM 105.5

Hawai'i Island

- KPUA 670 AM
- KHLO 850 AM
- KWXX 94.7 FM
- KKBG 97.9 FM
- KLEO 106.1 FM

Information and Resources

- American Red Cross website: www.redcross.org
- American Red Cross, Hawai'i State Chapter website: www.hawaii.redcross.org
- American Veterinary Medical Association Disaster Preparedness website: www.avma.org/disaster
- American Society for the Prevention of Cruelty to Animals website: www.asPCA.org/pet-care/disaster-preparedness
- The Board of Water Supply website: www.hbws.org
- Civil Defense/Emergency Management websites:
 - City and County of Honolulu Department of Emergency Management website: www.oahudem.org
 - Maui Emergency Management website: www.mauicounty.gov/70/Emergency-Management-Agency
 - Hawai'i County Civil Defense website: www.hawaiicounty.gov/civil-defense
 - Kaua'i Emergency Management website: www.kauai.gov/kema
 - Hawai'i Emergency Management Agency website: www.ready.hawaii.gov
- O'ahu emergency alert website: hnl.info
- The Emergency Management Section of your phone book
- "Disaster Planning: Food" publication prepared by the Hawai'i Department of Health, Nutrition Branch
- "Disaster Preparedness" publication prepared by the Hawaiian Humane Society, available at www.hawaiianhumane.org/disaster-readiness.html
- Emergency Preparedness Resources for Maui County Residents website: www.mauiready.org
- Hawaiian Electric Emergency Preparedness website: www.hawaiianelectric.com/prepare
- Hawaiian Electric O'ahu Outage map website: www.hawaiianelectric.com/safety-and-outages/power-outages/outage-map
- "Family Emergency Plan" prepared by the Federal Emergency Management Agency, available at www.ready.gov/make-a-plan
- Federal Emergency Management Agency website: www.fema.gov and www.ready.gov
- Flood Smart website: www.floodsmart.gov
- National Flood Insurance Program website: www.fema.gov/nfip
- National Weather Service Honolulu Forecast Office website: www.weather.gov/hawaii
- National Oceanic and Atmospheric Administration website: www.noaa.gov
- The Pacific Disaster Center website: www.pdc.org
- The Pacific Tsunami Warning Center website: www.ptwc.weather.gov
- "Turn Around Don't Drown" NOAA National Weather Service campaign website: tadd.weather.gov
- Underwriters' Laboratories website: www.ul.com
- DLNR Flood Hazard Assessment Tool: <http://gis.hawaiinfip.org/FHAT/>
- DLNR Food Control & Dam Safety website: www.floods.hawaii.gov
- Hawaii Wildfire Mitigation Office website: www.hawaiiwildfire.org

**Stay connected with Hawaiian Electric
Companies on social media:**



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@HawaiianElectric



**@HwnElectric (O'ahu)
@MauiElectric (Maui, Lāna'i, Moloka'i)
@HIElectricLight (Hawai'i)**



Visit us online:

www.hawaiianelectric.com



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Maui County | PO Box 398 | Kahului, Maui, HI 96733-6898

Hawai'i Island | PO Box 1027 | Hilo, HI 96721-1027



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