



Preparing Your Family and Home Before a Natural Disaster

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Creating a P-L-A-N

Prepare In Advance. Take time to prepare a disaster response plan with your family. Discuss different disasters you may experience — such as tornadoes, ice storms, and flooding — and plan how you can respond to each scenario. As you create your plans, consider giving each family member a specific, age-appropriate task. One family member might get the emergency kit and another might oversee emergency alerts as they are issued. Also, if any family members have age-related needs or mobility challenges, detail steps to make sure everyone can safely shelter or evacuate.

List Your Contacts. Create an emergency contact list and post it somewhere easily accessible for all family members. Your list may include contact information of extended relatives, friends, and neighbors. Consider saving copies in each family member's phone and printing copies to keep in your emergency kit and wallets. Familiarize yourself with local resources that may be beneficial in an emergency, including emergency personnel services, physicians, and pharmacies, and add these numbers to your list of important contacts.

Assess Your Exits. Have an evacuation plan in place in case you need to leave your home. The American Red Cross recommends having two designated meet-up points: one close to your home in case of in-home danger and one outside of your neighborhood in case you must evacuate the area. Consider where you could go, such as emergency shelters, hotels, or the home of a family member or friend. It may be helpful to print directions to your evacuation points and keep them somewhere accessible, such as in your vehicle or wallet. Keep in mind that depending on the disaster, some roads may be blocked by water, downed trees, or powerlines and you may need to take an alternate route.

Name Your Needs. As you plan, be mindful of any special needs your family might have based on age, medical, or dietary requirements. This may include special medicines or mobility challenges, for example. If you have pets, consider them in your plan as well. Be sure to practice and update your emergency plan regularly, especially as the needs of your family change. Practicing your emergency plan can help you remember what to do during an emergency when you may feel overwhelmed.

For tips and resources to create your emergency plan, visit <https://www.ready.gov/plan>. For suggestions of what to pack in an emergency kit, visit <https://www.ready.gov/kit>.

Receiving Alerts and Warnings

Become familiar with ways you can receive emergency alerts. Alerts may be broadcast via television, radio, mobile device, or public sirens. Consider buying a National Oceanic and Atmospheric Administration (NOAA) Weather Radio, which nationally broadcasts weather and other hazard information. NOAA radios serve all 50 U.S. states and continuously broadcast. For more information on NOAA Weather Radios, including specific broadcast frequencies, visit: <https://www.weather.gov/nwr/>.

In addition to a NOAA Weather Radio, downloading mobile apps may help you receive important disaster information. The American Red Cross Emergency App can keep you up to date on emergencies, alerts, and disaster preparedness tips. The Federal Emergency Management Agency (FEMA) also has a mobile app that can help you prepare for disasters. Many local television stations have mobile weather apps that can keep you updated about local disasters and will alert you if there is a specific emergency in your zip code. Keep flashlights, batteries, and charging devices or power packs on hand in case of a power outage. You may consider buying a weather radio you can power with a hand crank.

Types of Alerts and Warnings

When a dangerous weather event is forecast or occurs, the National Weather Service (NWS) may issue different types of alerts in your area. Learn more at <https://www.weather.gov/>. Generally, you can receive three types of emergency alerts: advisory, watch, or warning.

- A weather *advisory* lets you know that a non-life-threatening hazard is expected nearby.
- A weather *watch*, such as a tornado watch, recommends that you get prepared. A hazard in your area may occur.
- A weather *warning*, such as a thunderstorm warning, informs you a hazard is already occurring or will likely occur soon. These hazards are expected to have serious impacts. During a weather warning, you should act as local authorities and disaster alerts advise to keep yourself and those around you safe.

FEMA notes not every hazard or disaster has each level of alert – some hazards may arise too quickly to provide an advisory or watch. For more information on the emergency alerts you may receive, visit <https://www.ready.gov/alerts>.



Types of Disasters

As you take precautions to protect your family from a natural disaster, figure out what types of disasters are common in your area. Some of the most common natural disasters in the Southeastern United States are tornadoes, landslides, and earthquakes. In Kentucky, we may also experience severe winter storms, thunderstorms, fires, and floods. Read more about each weather event below.

Thunderstorms

If thunderstorms are forecast, secure loose objects that strong winds might blow away. Regularly trimming trees can keep damaged branches from falling onto your home. When a storm is approaching, avoid windows and move to an interior room. If outdoors, get to a sturdy building if possible. Do not take shelter under a tree, as the tree may fall on you or lightning might strike it. If you are in a vehicle, it is safest to drive to a secure building and get inside if time allows. However, being in a vehicle is safer than staying outdoors. Another hazard of thunderstorms is lightning. If you are outdoors, you are not safe from lightning. Even if you have not seen lightning, you should head indoors if you hear thunder.

Tornadoes

One way to protect your family from tornadoes is to be aware of the daily weather forecast in your area. While storms can come without warning, being mindful that experts predict severe weather in your area can help you stay vigilant and alert to danger if it arises. Many larger cities may have public warning sirens that sound during tornado warnings, but rural areas and smaller towns may not. Be sure you have access to weather alerts or a weather radio. Also, make certain you can receive alerts during the night. Warning signs of tornadoes include dark clouds with a green tint to the sky; large, low-lying clouds or cloud rotation; sounds of roaring wind like a freight train; and hail, flying debris, or dust.

If a tornado occurs, take shelter in an interior room such as a basement or on the lowest floor of your home, and stay away from windows. Rooms like a bathroom, closet, or center hallway are best. If you are in a mobile home, seek shelter elsewhere before the storm reaches your area. If you are outdoors, get inside immediately. If you cannot get inside, take shelter somewhere low such as in a ditch.

Regardless of where you take shelter, get low and protect your head from flying debris using what

you have around you. While any protection is better than none, using thick, sturdy items is best. If there is ample warning before a storm, consider grabbing bicycle or baseball helmets to use for protection. You can also keep items such as closed-toe shoes and head protection in the room of your home that you choose as the safest place to ride out a storm. For more tornado safety tips, visit <https://www.cdc.gov/disasters/tornadoes/>.

Floods

Severe flooding in Kentucky has been catastrophic in recent years, including the historic flooding in Eastern Kentucky in 2022. To protect your family and home during severe flooding, be ready to evacuate. Listen to your local radio, television, and weather stations if meteorologists expect significant rainfall or river cresting in your area, or if the National Weather Service issues a flood watch or warning. Pack necessities and find your emergency kit. Also make sure important paperwork (e.g., photo identification; Social Security cards; birth certificates; immunization records) are in a waterproof container in your emergency kit.

Consider moving valuables to higher ground to protect them. If time allows, unplug items in your home, disconnect all utilities, and close your main gas valve before you evacuate. During a flood, get to higher ground as soon as possible. Local authorities will alert you when they feel evacuation is necessary, but you can evacuate at any time you feel unsafe. When evacuating, avoid driving through flood waters and over bridges. When on foot, avoid any water near sources of electricity, such as downed power lines or electrical panels. Remember, even shallow moving water can sweep away your vehicle, knock you over if on foot, or have debris or electrical currents that can harm you.

Fires

To prepare your family for a wildfire or house fire, first make sure to install smoke alarms, and replace batteries regularly. The American Red Cross recommends replacing batteries once a

year at minimum. Test smoke alarms so all family members, especially children, know what they sound like. Ensure everyone knows how to dial 911; that you have and know how to use a fire extinguisher; and that everyone knows how to “stop, drop, and roll” should clothing catch on fire.

If a fire starts, get out and call 911 immediately. Yell “fire” loudly to alert other family members. Always use stairs when evacuating and avoid opening doors that feel warm. Smoke rises, so remain low to the ground to avoid smoke as much as possible. If you cannot safely exit your home, keep doors closed and block smoke from entering the room by placing a wet towel underneath the door. If you have access to a phone, call 911 and tell first responders you are trapped inside. Wave something brightly colored out a window to help emergency personnel find you. If you can evacuate your home, do not go back inside for any reason — tell first responders if someone is trapped inside.

In case of a wildfire, your home will be most protected if it has reduced *structural ignitability*. Structural ignitability is how quickly the materials that make up your home’s structure will ignite or catch on fire. Safety precautions include having a roof with a Class A fire rating and keeping your roof and gutters free of debris and leaves. The National Fire Protection Agency offers more ways to keep your home safe from home and wildfires at <https://www.nfpa.org/Public-Education>.

According to the Kentucky Energy and Environment Cabinet (EEC), arson is the leading cause of wildland fires in Kentucky. The second is uncontrolled burning of debris. Before you light a brush or burn pile on your property, “learn before your burn” by visiting <https://eec.ky.gov/Environmental-Protection/Air/Pages/Open-Burning.aspx>. The cabinet offers tips for what you can and cannot burn under Kentucky’s open burning regulations, as well as areas that prohibit open burning during certain times of the year. Check with your local officials about burn regulations in your area.

Earthquakes

Earthquakes can occur at any time with little to no warning. Before an earthquake, find places in your home, work, or school that provide protection away from windows and things that could fall on you. Think about what furniture you could shelter under to protect your head and body from falling objects. Taking preventative steps now can make your home safer for your family, such as securing tall and heavy furniture to the wall.

During an earthquake, the American Red Cross advises that you “drop, cover, and hold on.” Avoid moving as much as possible and use what is around you to protect your body. If you are indoors, remain there until shaking has stopped. Be aware of aftershocks, which are smaller earthquakes occurring after the first, larger earthquake. The shaking from an earthquake may cause structural damage, so avoid elevators and debris as you exit.

If you are outdoors during an earthquake, get low to the ground in an open space. Avoid structures and trees that could fall on you. If you are in a vehicle, keep your seatbelt on and find a clear space to pull over. Do not drive away until the shaking has stopped. Avoid driving on roads and bridges that the earthquake may have damaged.

And if you're thinking, “Earthquakes don't occur in Kentucky,” you are mistaken. According to the Kentucky Geological Survey, in 2021 a magnitude 3.1 earthquake occurred in northern Lewis County. There have been at least 77 earthquakes on record for Kentucky since 1931, with the largest occurring in Bath County in 1980 when a magnitude 5.2 earthquake caused an estimated \$3 million in damages.

Hurricanes

While Kentucky is not a coastal state, it can still experience severe weather caused by a hurricane. When a hurricane hits land, strong winds and heavy rain may affect surrounding areas for hundreds of miles from the eye of the storm. If a hurricane path

is forecast for your area, be prepared for potential storm or flood watches, warnings, and evacuations that may result.

Landslides

Landslides occur when earth moves gradually or quickly downward, often following other disasters such as heavy rain, flooding, and earthquakes. If you suspect or notice a landslide, evacuate at once. Alert authorities and those in the surrounding area if possible. You may be able to hear signs of debris moving, such as cracking trees. Landslides can occur anywhere in Kentucky, but are more prevalent in the Eastern Kentucky Coal Field, Outer Bluegrass, the Knobs region, and along the Ohio River Valley. Other warning signs that a landslide may be imminent along a sloping surface such as mountain, hill, or riverbank include broken or leaking pipes; “scarps,” which are offsets in the soil; tilted trees, poles, posts, or walls; or cracks in buildings, walls, and roads. For more information on landslide hazards in Kentucky, review https://www.uky.edu/KGS/education/factsheet/landslide_factsheet.pdf.

Winter Weather

Finally, another severe weather threat in Kentucky is winter weather. This can include extremely low temperatures, freezing rain or ice storms, snowstorms, and blizzards. Prepare your vehicle by refueling to keep the fuel line from freezing. A frozen fuel line can prevent you from evacuating in an emergency. Keep items in your car to keep you warm and safe, such as blankets, coats, food, water, and kitty litter or sand to give your tires traction if you get stuck in the snow. If you become stranded in your vehicle, call for help and remain inside. Be sure the exhaust pipe is clear before continuing to run the vehicle. To conserve gas, only run the vehicle for 10 minutes per hour. Be sure you have good ventilation and avoid inhaling toxic fumes. Never run a vehicle inside a closed or poorly ventilated garage.

In your home, be prepared with supplies to keep warm if you lose power and heat. If you must go outside, wear layers of warm clothing including gloves, scarves or mouth coverings, and hats that provide protection for your ears and head. Stay indoors as much as possible. Dress in layers, stay together with your family and pets in one room of your home, and have extra blankets and food on hand. If you plan to use a fireplace, wood-burning stove, or portable generator, be sure you know how to use it safely to avoid danger to people, pets, or property. Gas grills and generators produce carbon monoxide, and you should never bring them inside as a heating source.

Conclusion

As you prepare for a variety of disasters that could occur, consider taking a first-aid or CPR course to learn how to help if someone is injured. Talking with your family about disaster preparedness and safety plans can reduce fears and ensure everyone knows what to do in an emergency. Always keep items you may need to grab quickly in consistent, designated areas of your home. These items may include shoes, cell phones, keys, IDs, medications, and your emergency kit, for example. Preparing in advance can help protect you, your family, and your home when disaster strikes.

Resources and References:

- American Red Cross, How to Prepare for Emergencies. <https://www.redcross.org/get-help/how-to-prepare-for-emergencies.html>
- Federal Emergency Management Agency, FEMA Mobile Products. <https://www.fema.gov/about/news-multimedia/mobile-products>
- FEMA, Be Aware, Be Prepared, Take Action. https://www.ready.gov/sites/default/files/2022-02/fema_guide-for-alerts-and-warnings_2021.pdf
- Kentucky Geological Survey, Earthquakes. <https://www.uky.edu/KGS/education/factsheet/Earthquakes.pdf>
- National Weather Service, Safety Tips. <https://www.weather.gov/safety/>

This publication is part of the “In the Face of Disaster” Publication Series:

- Preparing Your Family and Home Before a Natural Disaster
- Protecting Your Family and Home After a Natural Disaster
- Considerations for Food and Water Before a Natural Disaster
- Keeping Food and Water Safe After a Natural Disaster
- Financial Considerations Before a Natural Disaster
- Financial Management After a Natural Disaster
- Considerations for Older Adults and People with Disabilities Before a Disaster
- Helping Older Adults and People with Disabilities Cope After a Disaster
- Navigating Trauma After a Natural Disaster

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