Be Prepared for Wildfires during COVID-19

A wildfire is an unplanned, unwanted fire burning in a natural area, such as a forest, grassland, or prairie. Wildfires are increasing in size and intensity across the United States, and these trends are expected to continue. As communities expand into natural areas, homes are increasingly situated in or near areas prone to wildfires, called the wildland-urban interface. In fact, one-third of all homes in the United States are in the wildland-urban interface and face enhanced wildfire risk. As warm and dry conditions become the norm in many communities, experts encourage us to think about wildfire risk year-round. Wildfires can occur anywhere in the country and can occur at any time throughout the year. The potential is always higher during periods with little or no rainfall, which make brush, grass, and trees dry and burn more easily. High winds can also contribute to spreading a fire. If you live in a wildfire-prone area, prepare now and work with your neighbors to build a fire adapted community. Understand that your planning may be different this year because of the need to protect yourself and others from COVID-19. COVID-19 impacts us all, including firefighters, and an increase in infections may compromise their ability to respond to wildfires. Now more than ever we need to prepare ourselves and our communities for wildfires while taking recommended actions to protect one another from COVID-19.

Protect Yourself and Others from COVID-19

The COVID-19 pandemic continues to pose a serious public health risk. For more information see cdc.gov/coronavirus and redcross.org/coronavirus.

- In public, cover your mouth and nose with a cloth face covering and practice physical distancing by keeping 6 feet between yourself and others. Don’t use cloth face coverings on children under age 2, anyone who has trouble breathing, or is unable to remove it without help. Avoid close contact with people who do not share your home.
- Wash your hands often with soap and water for at least 20 seconds. Soap and water are always preferable, but if they are not available, use a hand sanitizer that contains at least 60% alcohol.
- Always cover your coughs and sneezes with a tissue or use the inside of your elbow.
- Clean AND disinfect frequently touched surfaces and items daily, including tables, doorknobs, light switches, countertops, handles, desks, phones, remote controls, keyboards, toilets, faucets, and sinks.
- If you are at higher risk for serious COVID-19 illness, continue to avoid all non-essential outings, and gatherings. It is ok to go outside to exercise, walk pets, visit medical professionals, and leave during an emergency or if advised to evacuate during a wildfire.

Prevent Wildfires

Prevention is critical as people cause 85 percent of wildfires by burning debris, using equipment improperly, discarding cigarettes carelessly, leaving campfires unattended and by arson.

- Don’t drive your vehicle onto dry grass or brush. Hot components under your vehicle can spark fires.
- Use equipment responsibly. Lawn mowers, chain saws, tractors, and trimmers can all spark a wildfire.
- Use caution any time you use fire. Dispose of charcoal briquettes and fireplace ashes properly, never leave any outdoor fire unattended, and make sure that outdoor fires are fully extinguished before leaving the area.
- If residential debris burning is allowed – use caution! After obtaining any necessary permits, ensure that burning is not currently restricted in your area.
- Store combustible or flammable materials in approved safety containers away from the house.
Keep the gas grill and propane tank at least 15 feet away from any structure. Do not use the grill during potentially dangerous fire weather conditions. Always have a fire extinguisher or hose nearby.

**Before: Understand Your Risk**

<table>
<thead>
<tr>
<th>Wildfire impacts</th>
<th>Understand your risk</th>
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</thead>
<tbody>
<tr>
<td>Wildfires can cause death or injury to people and animals. Homes and businesses may be damaged or destroyed. Prolonged power outages may persist before, during and after a wildfire. Also, transportation, gas, communications, and other services may be disrupted. Wildfires increase the potential for erosion, landslides, floods, debris flows, and altered water quality.</td>
<td>Find out if you live in an area prone to wildfires. Reach out to your state or local government emergency management agency for help understanding your local wildfire risk.</td>
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<tr>
<td>- For a list of state agencies, see <a href="http://fema.gov/emergency-management-agencies">fema.gov/emergency-management-agencies</a>. Contact your state or local fire department for help understanding your wildfire risk. For a list of fire departments, see <a href="http://apps.usfa.fema.gov/registry/">apps.usfa.fema.gov/registry/</a>.</td>
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<td>Check resources from state, local, tribal, and territorial health departments for more information on COVID-19 cases and deaths in your area.</td>
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<td>- Find contact information at <a href="http://usa.gov/state-tribal-governments">usa.gov/state-tribal-governments</a>.</td>
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**Health impacts of wildfire smoke and COVID-19**

Wildfire smoke is a complex mixture of air pollutants that are harmful to human health. Exposure to air pollutants in wildfire smoke can irritate the lungs, cause inflammation, alter immune function, and increase susceptibility to respiratory infections, like COVID-19. Recent research suggests that air pollutant exposure worsens COVID-19 symptoms and outcomes. Wildfire smoke can make anybody sick, but people with chronic conditions, children, and pregnant women are especially at risk of severe illness. Individuals known to be vulnerable to wildfire smoke exposures include:

- Children less than 18 years
- Adults age 65 years or older
- Pregnant women
- People with chronic health conditions such as heart or lung disease, including asthma and diabetes
- Outdoor workers
- People of low socioeconomic status, including those who are homeless and with limited access to medical care.

Individuals who are either susceptible to or affected by COVID-19 may have health conditions that also make them vulnerable to wildfire smoke exposure. People who might also be at risk from wildfire smoke because of COVID-19 include:

- Individuals who are immunocompromised or taking drugs that suppress the immune system;
- Individuals with or recovering from COVID-19. Because of compromised heart and lung function due to COVID-19, they may be at increased risk of health effects from exposure to wildfire smoke.

For more information about wildfire smoke and your health, talk to your healthcare provider, and visit [cdc.gov/air/wildfire-smoke/default.htm](http://cdc.gov/air/wildfire-smoke/default.htm).
Before: Prepare Your Home and Community

Understanding wildfires is a key part of preparedness. Embers, small burning pieces of wood and vegetation, are the most common way houses catch fire during wildfires. A wildfire does not engulf everything in its path, it only advances to locations that meet the requirements of combustion. By altering the type, size, quantity, and spacing of vegetation and other fuels, you can influence the movement of a wildfire and decrease its potential to ignite your home.

Vegetation Management

- Home ignition zones: To increase your home’s chance of surviving a wildfire, choose fire-resistant building materials and limit the amount of flammable vegetation in the three home ignition zones. The zones include the Immediate Zone: (0 to 5 feet around the house), the Intermediate Zone (5 to 30 feet), and the Extended Zone (30 to 100 feet).

- Landscaping and maintenance: To reduce ember ignitions and fire spread, trim branches that overhang the home, porch, and deck and prune branches of large trees up to 6 to 10 feet (depending on their height) from the ground. Remove plants containing resins, oils, and waxes. Use crushed stone or gravel instead of flammable mulches in the Immediate Zone (0 to 5 feet around the house). Keep your landscape in good condition.

- Fire resistive construction

  - Roofing and Vents: Class A fire-rated roofing products, such as composite shingles, metal, concrete, and clay tiles, offer the best protection. Inspect shingles or roof tiles and replace or repair those that are loose or missing to prevent ember penetration. Box in eaves but provide ventilation to prevent condensation and mildew. Roof and attic vents should be screened to prevent ember entry.

  - Decks and Porches: Never store flammable materials underneath decks or porches. Remove dead vegetation and debris from under decks and porches and between deck board joints.

  - Siding and Windows: Embers can collect in small nooks and crannies and ignite combustible materials; radiant heat from flames can crack windows. Use fire-resistant siding such as brick, fiber-cement, plaster, or stucco, and use dual-pane tempered glass windows.

  - Ensure your home and neighborhood has legible and clearly marked street names.

Join community-wide efforts

Wildfires affect entire communities. Without community-wide action to manage vegetation and use fire resistant construction throughout a neighborhood, wildfires can easily spread throughout a community. Find out about efforts in your area and get involved. Become a fire-adapted community by building strong and collaborative partnerships between the local government, the local fire service, and community members.

- Contact your local government/fire department to understand efforts already underway and how you can get involved.

- Explore existing resources:
  - usfa.fema.gov/wui_toolkit/wui_tools.html
  - nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA

Before: Learn Skills, Gather Supplies, Make Plans

Prepare now so that you have the critical knowledge, skills, and supplies to meet your basic needs and protect yourself and others from COVID-19.

Learn critical skills

- Learn first aid and CPR. The Red Cross has a variety of online classes to learn these skills. Also, download the free First Aid App.
- Learn how to protect yourself and others from COVID-19 at cdc.gov/coronavirus.
- Learn how to protect yourself and your loved ones from wildfire smoke at cdc.gov/air/wildfire-smoke/default.htm.
Gather emergency supplies

Customize this basic supply list to meet your needs. Give yourself more time than usual to prepare your supplies. Home delivery is the safest choice. If in-person shopping is your only choice, take steps to protect everyone’s health when running essential errands.

- Stay-at-home kit (2 weeks of emergency supplies): Include everything you need to stay at home for at least 2 weeks with items such as food, water, cleaning and disinfectant supplies, soap, paper products and personal hygiene items.
- Evacuation kit (3 days of supplies in a “go bag”): Include everything you need if you have to evacuate and be on your own for 3 days — food, water, personal hygiene items, and cleaning and disinfectant supplies that you can use on the go (tissues, hand sanitizer with 60% alcohol and disinfection wipes).
  - For COVID-19 protection, ensure that you have cloth face coverings for everyone in your home who can wear one safely. Cloth face coverings do not provide protection from wildfire smoke.
  - For wildfire smoke, N95 respirators provide protection, but they might be in short supply as frontline healthcare workers use them during the pandemic. Respirators must be worn correctly and are not made to fit children.
- Prescription medication: Store a 7 to 10-day supply of prescription medicines in a waterproof, childproof container to take with you if you evacuate. For any medications, be sure to follow directions carefully.

Make an evacuation plan

Learn your community’s evacuation plan. Then, make and practice an evacuation plan with your household members. Know where you will go, how you will get there, where you will stay, how you can protect yourself and others from COVID-19, and what you will bring.

- Ask friends/relatives outside your area if you would be able to stay with them. If they have people in their home at higher risk for serious COVID-19 illness, make other arrangements. Check with hotels, motels, and campgrounds to see if they are open. Find out what sheltering resources are available from local emergency management officials, and if sheltering plans have been adapted because of COVID-19. Familiarize yourself with the CDC recommendations for staying safe in a public disaster shelter during COVID-19. Have a plan for your pets.
- Know the current COVID-19 guidelines and requirements for any location that you plan to go to for evacuation and shelter.
- If you will need to share transportation, plan now. If you will need to use public transportation, including paratransit, contact your local emergency management agency to ask how an evacuation will work. If you have a car, keep it in good working condition and keep the gas tank full.
- If you have a disability, need assistance walking, have low vision, are blind, deaf or hard of hearing, develop a comprehensive evacuation plan with family and care providers. Assess your abilities and needs before, during, and after a disaster. Create a personal support network to assist you. If you receive regular medical treatment, work with your healthcare provider to determine how to maintain treatment if you must evacuate.
- Remember, if authorities advise you to evacuate, be prepared to leave immediately with your evacuation kit ("go bag" of emergency supplies).
- Always keep an eye on conditions in your area. You may not receive an evacuation order, as these systems are not perfect. Be prepared to take the initiative if you assess the need to evacuate.
Plan to protect yourself from wildfire smoke

The best way to protect against the harmful effects of wildfire smoke is to reduce wildfire smoke exposure, for example, by seeking **cleaner air shelters and cleaner air spaces**.

- While **social distancing guidelines** are in place, finding cleaner air might be challenging if public facilities such as libraries, community centers, and shopping malls are closed or have limited capacity.
- Create a cleaner air space at home to protect yourself from wildfire smoke during the COVID-19 pandemic.
  - Use a portable air cleaner in one or more rooms. Portable air cleaners work best when run continuously with doors and windows closed.
  - **Do-it-yourself box fan** filtration units should never be left unattended.
  - During periods of extreme heat, pay attention to **temperature forecasts** and know how to stay safe in the heat.
  - Whenever possible, use air conditioners, heat pumps, fans, and window shades to keep your cleaner air space comfortably cool on hot days.
  - If you have a forced air system in your home, it may be necessary to work with a qualified heating, ventilation, and air conditioning (HVAC) professional about different filters (HEPA or MERV-13 or higher) and settings (recirculate and “on” rather than “Auto”) that can be used to reduce indoor smoke.
  - Avoid activities that create more indoor and outdoor air pollution, such as frying foods, sweeping, vacuuming, and using gas-powered appliances.

- Limit outdoor exercise when it is smoky outside or choose lower-intensity activities to reduce smoke exposure.
- Although **N95 respirators** provide protection from wildfire smoke, they might be in short supply as frontline healthcare workers use them during the pandemic.
- **Cloth face coverings** that are used to slow the spread of COVID-19 offer little protection against harmful air pollutants in wildfire smoke because these coverings do not capture most small particles in smoke.
- For more information about how to protect yourself from wildfire smoke, talk to your healthcare provider, and see
  - [epa.gov/airnow/smoke_fires/prepare-for-fire-season-508.pdf](https://www.epa.gov/airnow/smoke_fires/prepare-for-fire-season-508.pdf)

**Be sure that you can monitor changing conditions**

Have access to alerts and notifications so that you can monitor conditions and receive instructions from local officials, even during a power outage. Keep track of fires near you so you can be ready to evacuate quickly.

- Register to receive free emergency alerts that your community offers.
- Understand your community’s plan to notify individuals with disabilities.
- Download the free Red Cross **Emergency App**.
- Purchase a battery-powered radio to receive information from local authorities during a power outage.
- For national resources on wildfire outlooks, see [weather.gov/fire/](https://www.weather.gov/fire/) and [inciweb.nwcg.gov/](https://inciweb.nwcg.gov/)
- Use the **Air Quality Index (AQI)** to evaluate local and regional air quality conditions.
- Visit [airnow.gov](https://www.airnow.gov) to find reliable information about wildfire smoke and air quality.
- If there is a large wildfire in your area, an **Air Resource Advisor** may be assigned to provide regular **wildfire smoke outlooks**.

Know the types of notifications to expect and what to do when you receive them. The National Weather Service issues Fire Weather Watches and Red Flag Warnings to alert fire departments of the onset, or possible onset, of critical weather and dry conditions that could lead to rapid increases in wildfire activity. The type of weather patterns that can cause a watch or warning include low relative humidity, strong winds, dry fuels, the possibility of dry lightning strikes, or any combination of the above.

- A Fire Weather Watch is issued when weather conditions could exist in the next 12-72 hours. Fire danger is high.
A Red Flag Warning is issued for weather events which may result in extreme fire behavior that will occur within 24 hours. A Red Flag Warning is the highest alert. During these times extreme caution is urged by all residents, because a simple spark can cause a major wildfire.

**Make a communication plan**
Create a plan to reconnect with loved ones and to reach your support network and other emergency contacts if communication networks are down. Have a back-up battery to charge your cell phone.
- Complete a [contact card](#) for each member of your household, and support network, and ensure that they carry it. Designate an out-of-town contact who can help your household reconnect. Text is best. A text message may go through when a phone call won’t.

**Safeguard critical documents**
Safeguard important documents, including personal, financial, insurance, and medical records so you can start recovering right away.
- Birth certificates, passports, Social Security cards, insurance policies, deed, mortgage, lease, loan papers. Photos of belongings.
- Current digital photos of loved ones updated every six months, especially for children.
- List of medications, allergies, and medical equipment.
- See [Disasters and Financial Planning](#) and [Emergency Financial First Aid Kit](#) for more information.

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### During: Respond Appropriately

Evacuate immediately if advised. Always keep an eye on conditions in your area. You may not receive an evacuation order, as these systems are not perfect. Be prepared to take the initiative if you assess the need to evacuate.

#### Pre-evacuation steps
When an evacuation is anticipated, follow these steps (if time allows):
- Shut all windows and doors. Remove flammable window shades, curtains and close metal shutters.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter; turn off pilot lights. Shut off the air conditioning.
- Gather up flammable items from the exterior of the house and bring them inside (patio furniture, toys, trash cans).
- Turn off propane tanks. Move propane BBQ appliances away from structures. Don’t leave sprinklers on or water running, they can affect critical water pressure.
- Back your car into the driveway with vehicle loaded and all doors and windows closed.
- Ensure your Emergency Supply Kit is in your vehicle. Locate your pets and take them with you.

#### Evacuate
All evacuation instructions provided by officials should be followed immediately for your safety. Leave as soon as fire officials recommend evacuation to avoid being caught in fire, smoke, or road congestion.
- Officials will determine the areas to be evacuated and escape routes to use depending upon the fire’s location, behavior, winds, and terrain.
- You will be advised of potential evacuations as early as possible. You must take the initiative to stay informed and aware. Listen to your radio/TV for announcements from local officials.
### After: Stay Safe

**Do not return home until authorities say it is safe**

- Do not enter your home until fire officials say it is safe.
- Use caution when entering burned areas as hazards may still exist, including hot spots, which can flare up without warning.
- Avoid damaged or fallen power lines, poles, and downed wires.
- Watch for ash pits and mark them for safety—warn family and neighbors to keep clear of the pits also.
- Follow public health guidance on safe cleanup of fire ash and safe use of masks. Children should not do any cleanup work.
- Ensure your food and water are safe.
- Discard any food that has been exposed to heat, smoke or soot.
- Do NOT ever use water that you think may be contaminated to wash dishes, brush teeth, prepare food, wash hands, make ice or make baby formula.

### Take care of emotional health

When we experience a disaster or other stressful life event, we can have a variety of reactions, which may include:

<table>
<thead>
<tr>
<th>Feeling physically and mentally drained</th>
<th>Arguing more with family and friends.</th>
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<tbody>
<tr>
<td>Having difficulty making decisions or staying focused on topics</td>
<td>Feeling tired, sad, numb, lonely or worried</td>
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<tr>
<td>Becoming easily frustrated on a more frequent basis</td>
<td>Experiencing changes in appetite or sleep patterns</td>
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Most of these reactions are temporary and will go away over time. Try to accept whatever reactions you may have. Look for ways to take one step at a time and focus on taking care of your disaster-related needs and those of your family. Keep a particularly close eye on the children in your family.

- See [redcross.org](http://redcross.org) for more information on emotional recovery
- Free National Disaster Distress Helpline: Available to anyone experiencing emotional distress related to a disaster. Call 1-800-985-5990 or text TalkWithUs to 66746 to speak to a caring counselor
  - Deaf/Hard of Hearing. Text TalkWithUs to 66746. Use your preferred relay service to call 1-800-985-5990. TTY 1-800-846-8517
  - Spanish Speakers. Call 1-800-985-5990 and press "2" or from the 50 States, text Hablanos to 66746. From Puerto Rico, text Hablanos to 1-787-339-2663
- If you are feeling overwhelmed with emotions such as sadness, depression, anxiety, or feel like you want to harm yourself or someone else, call 911 or the National Suicide Prevention Lifeline at 1-800-273-TALK (1-800-273-8255)

### References

- National Fire Protection Association
- Centers for Disease Control and Prevention
- Federal Emergency Management Agency