



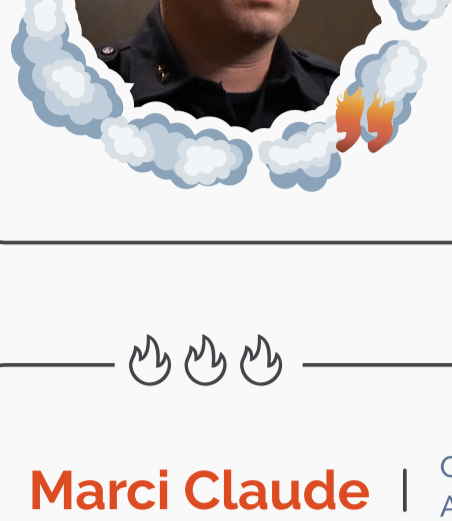
# During Wildfires



The bad news is that wildfires can be incredibly destructive and deadly. The even worse news: They're poised to wreak more havoc in the years to come. In fact, more than 4.5 million homes in the United States are at a high or extreme risk from those fires, according to a [2017 Verisk wildfire risk analysis](#).

If you live in a [wildfire-prone state](#), it's especially important to be aware of how to stay safe when wildfires break out. These states are California, Texas, Colorado, Arizona, Idaho, Washington, Oklahoma, Oregon, Utah, Montana, New Mexico and Wyoming. That said, states such as Florida, [Tennessee](#), Georgia, Kansas and North Carolina are by no means immune to wildfire danger. This guide provides tips to help no matter where you live.

## Expert Quotes on Wildfire Safety



**Daniel Berlant** | ASSISTANT DEPUTY DIRECTOR OF CAL FIRE

"You don't want to open the door and get out and panic at the very last minute as the fire is approaching, because you're not going to be able to outrun a fire."



**Marci Claude** | GATLINBURG CONVENTION AND VISITORS BUREAU PUBLIC RELATIONS MANAGER

"Working jointly with Tennessee Division of Forestry, the Gatlinburg Fire Department has spearheaded efforts to educate Gatlinburg citizens on how to implement Firewise practices at home. The Department has hosted two outreach events and is working with local neighborhoods on becoming Firewise communities."



**Joe Page** | WHITEFISH (MONT.) FIRE CHIEF

"During an emergency is not the time for you and your spouse to have discussions about what's important to fit in the car and what's not."



**Kory Honea** | BUTTE COUNTY (CALIF.) SHERIFF

"We have to check with our partners here to make sure that it's safe for people to go back in. That's when we say it's safe, because if we don't do this, people could die."



**Rick Mullen** | MALIBU (CALIF.) MAYOR

"We're kinda in unknown territory 'cause the scale of loss of vegetation is pretty unprecedented. People have been sandbagging their properties left and right and are being cautious and preemptive."



## Safety Preparation Before a Wildfire Occurs

Take steps now so that if a wildfire breaks out, you and your property are in better shape to get through it. The first thing is to sign up for your community's warning system alerts. [The Emergency Alert System](#) and the [National Oceanic and Atmospheric Administration Weather Radio](#) also alert the public to wildfires and other dangers.



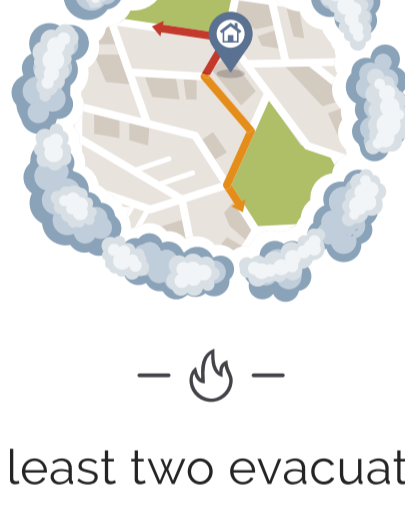
- ✓ Fire-resistant materials around your home and property for repairs, renovations and building
- ✓ Low-combustible materials for gates, walls and landscaping to act as a barrier against fire
- ✓ Noncombustible outdoor furniture
- ✓ Decks, porches, gutters and eaves clear of leaves, debris, pine cones and tree bark
- ✓ An outdoor water source and hose that can get water to any area of your property
- ✓ An emergency plan
- ✓ Insurance coverage that is adequate to replace your property
- ✓ Hydrated and maintained yards
- ✓ Keeping brown grass cut
- ✓ Quick disposal of lawn cuttings and debris
- ✓ Wire mesh around exterior attic vents, decks and patios
- ✓ Trees pruned to make the lowest branches 6 to 10 feet from the ground
- ✓ A [home security system](#) with smart home and fire protection options



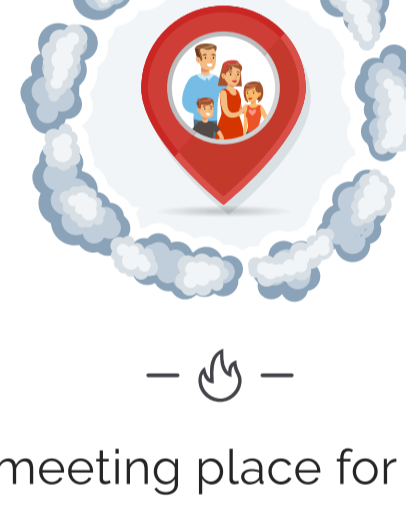
- ✗ Firewood, propane tanks and other flammable materials within **30 feet** of your home, shed and other structures you want to survive a wildfire (ideally, they'd be at least 100 feet away)
- ✗ Dead vegetation within 10 feet of the house (check under your porches and decks!)
- ✗ Loose shingles or roof tiles

## What to Include in Your Emergency Plan

Developing an emergency plan is a key part of wildfire safety preparation. Include the following essentials in your plan:



At least two evacuation routes for everyone in your family (and practice them!)



A meeting place for you and your family after evacuation



Considerations for family members with disabilities, asthma or other conditions



Considerations for pets and livestock

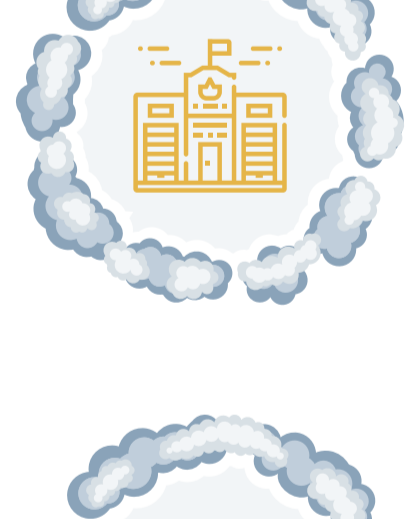


Emergency supply kit with N95 respirator masks, necessary medications, **alert devices**, documents & personal ID stored in a fireproof location

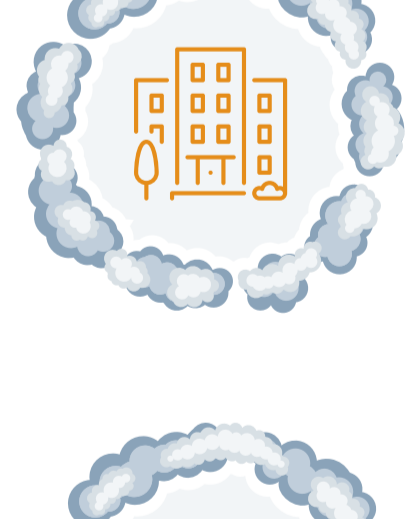


Digital copies of important documents

## How Various Groups Can Help



**Local fire department:** Get in touch for preparedness and evacuation tips and to get an idea of how the department would respond to your neighborhood if a wildfire occurs.



**Planning/zoning office:** Ask about the wildfire risk level of your home and if there are any ordinances that you should be aware of (for example, [Cal Fire mandates](#) that easily combustible vegetation be kept at least 100 feet from walls and that new builds near forests and wilderness must be made of fire-resistant materials).

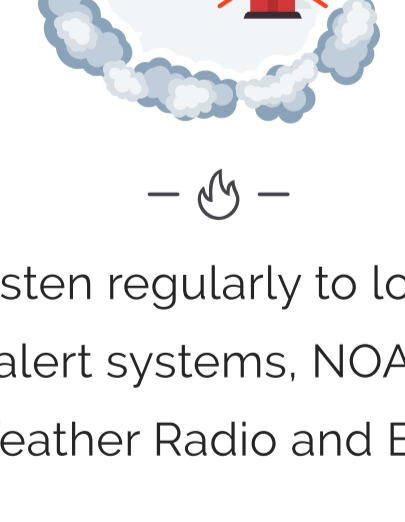


**Homeowners association:** Reach out to learn about building materials, landscape designs and home designs.

## Safety During a Wildfire

In some cases, a wildfire may take your area **by surprise**, as the 2018 Camp Fire did with Paradise, California. You may be told to evacuate immediately—**do it!** Any reluctance to leave may prove fatal.

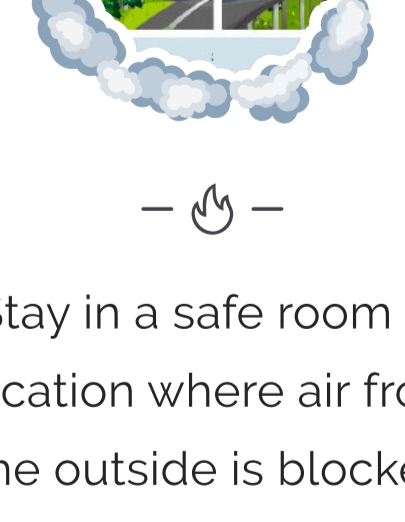
However, you do get some warning in many situations. For example, fires may have been raging in your general area for a few days or weeks, and you're aware that you may need to evacuate at some point. In those cases, keep an eye on conditions, and get ready to evacuate should the need arise.



Listen regularly to local alert systems, NOAA Weather Radio and EAS.



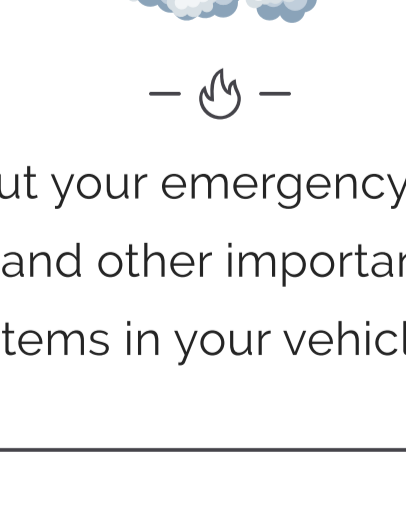
Wear **N95 respirator masks**.



Stay in a safe room or location where air from the outside is blocked from getting in.



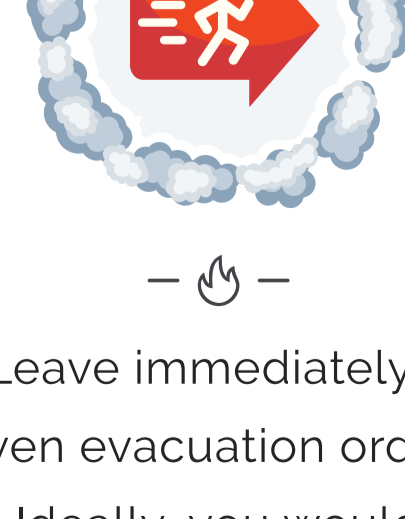
Move outdoor furniture, door mats, potted plants in wooden basins and the like inside or move them as far away from your house as you can.



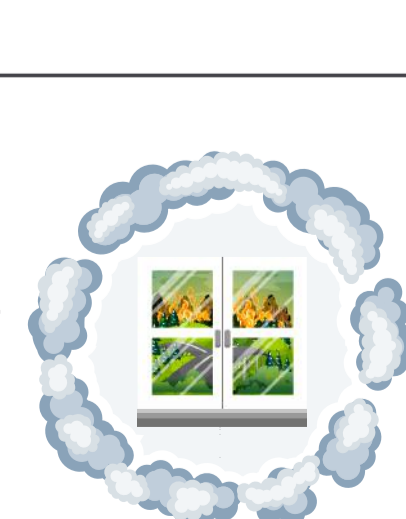
Put your emergency kit and other important items in your vehicle.



Fill garbage cans, tubs, pools and the like with water to help firefighters if they end up on your property.



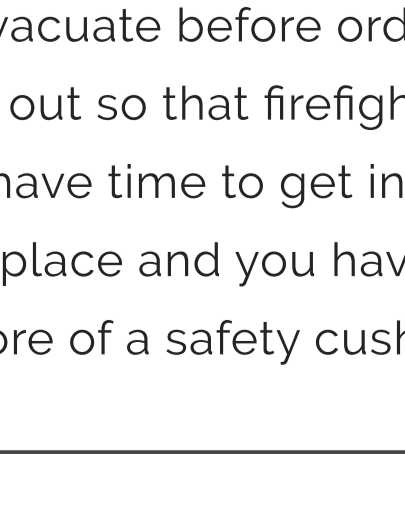
Leave immediately if given evacuation orders. Ideally, you would evacuate before orders go out so that firefighters have time to get into place and you have more of a safety cushion.



Connect water hoses.



Call 911 if you're trapped, but understand that it may be a while before responders can reach you. Turning on your lights can help them find you more quickly.



Close all vents, doors, windows, **garage doors** and pet doors so embers don't get into your house.

Evacuating can mean spending lots of time in your vehicle waiting for traffic to move. If possible, evacuate in a vehicle that can hold lots of gas and that can withstand the waiting. Evacuate away from the fire and away from the direction it is moving. Aim for wide roads if feasible because narrow roads can easily become blocked. Keep your vehicle's doors unlocked and the headlights on. In smoky conditions, close all windows, and switch off ventilation fans.



## Sheltering in Place

Sometimes, evacuation isn't safe, for example, when your only evacuation routes would take you into the fire or when the fire is moving too quickly/is too close that you don't have the time to safely evacuate.

Other scenarios in which you shouldn't evacuate: If you can't see where you're going **due to smokiness** or if your escape routes are too congested or blocked. Emergency personnel may also recommend that you stay.

However, some houses and structures aren't safe for sheltering in place. In those cases, make plans with neighbors to evacuate to their safer house should the need arise.

Do any of the following sound like your home? If yes, your home is an unsafe shelter.



**Trees or thick grass grows right next to the home.**



**The house is on a steep slope with lots of vegetation below.**



**Brush piles, wood sheds or wood piles are right next to the home.**



**The house has wood shingles or wood siding.**

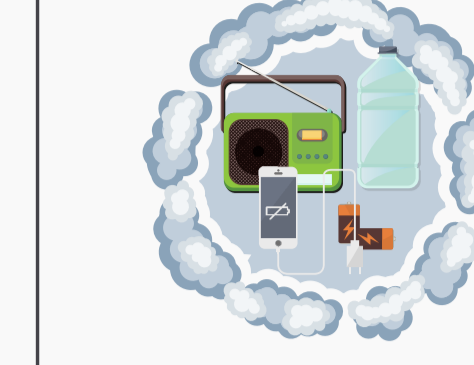


**Thick shrubs are near sliding glass doors and windows.**

## How to Shelter in Place



Turn off the house's propane or natural gas.



Turn off devices that circulate air throughout the house.



Wet the yard and roof with a sprinkler.



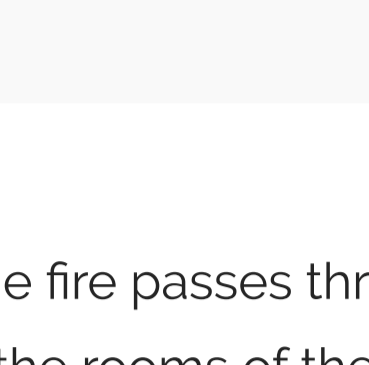
Take a cellphone, fire extinguisher, bottled water, battery-powered radio and flashlight with extra batteries when you gather with your family.



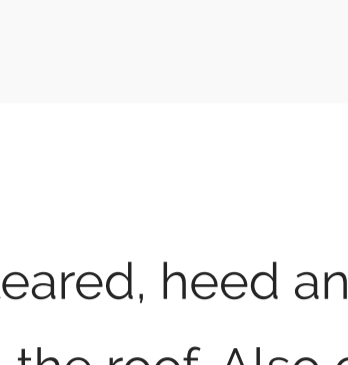
Move fabric-covered furniture away from windows and doors.



Choose the hallway or room that is farthest from the fire. Avoid the house's perimeter walls.



Close all inside doors to slow the spread of fire inside the house.



Try to stay calm. It'll likely get very hot inside the house, but it's even hotter outside. Stay in.

After the fire passes through and the thick smoke has cleared, heed any radio instructions for what to do. Check the rooms of the house as well as its exterior and the roof. Also check below decks and around fences. Put out any fires, sparks or embers. Avoid opening any interior doors that feel hot, and stay away from fragile trees and downed power lines. Wear long pants, long-sleeved shirts and gloves made of cotton or wool.

## Driving in a Wildfire

Many people who perish in wildfires do so in vehicles. One reason is because they wait too long to evacuate or they think that their vehicle can move faster than a wildfire. However, wildfires have the ability to leapfrog and hopscotch obstacles. Another reason people die in vehicles is due to the conditions—debris on the road, poor visibility and high evacuee traffic, for example.

However, if you find yourself driving or in a vehicle during a wildfire, you **do have options**:



Turn your headlights and hazard lights on.



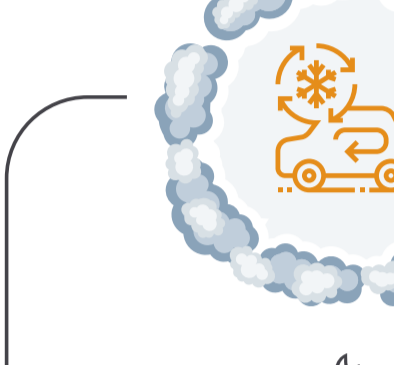
Drive slowly.



Close or block air vents.



Roll up windows.



Use recirculated air from the air conditioner.

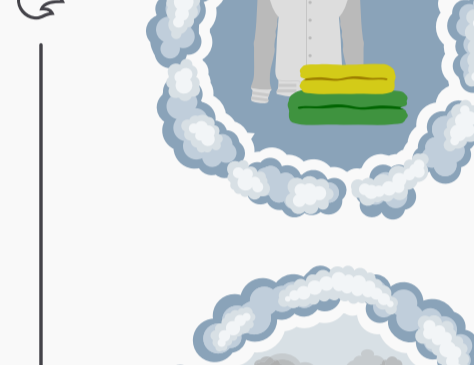


Use dry material to cover your face and skin (wet material can create steam because of the heat that may surround you)

## How to Avoid the Flames



Park in an area where there are no objects such as trees and debris to feed flames. If possible, locate a solid object such as a concrete wall to act as a barrier between you and the flames.



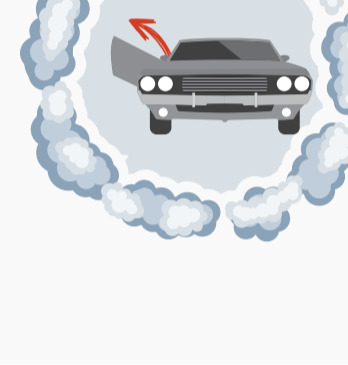
Cover yourself with a jacket or blanket.



Get below the windows.



Keep the engine running.



Exit only after the wall of fire has passed.

Your tires might explode, but stay inside the car. If you get out, you'll never be able to stay ahead of the fire. Also, bring wool blankets instead of synthetic blankets because wool isn't as flammable.

## On Foot in a Wildfire

If you're **on foot** in a wildfire, find a space with no vegetation and flammable material, and get as low as possible like in a ditch. Lie with your face down, and cover your body with water, dirt, mud or nonflammable fabrics (a wool blanket is more flame-resistant than a synthetic blanket). If you call 911, it's possible but unlikely that rescuers can get to you soon. It won't hurt to reach out.

Your biggest risk often comes from smoke inhalation, not from the flames themselves. It's critical that you have a supply of clean air. Use a cloth to act as a filter around your mouth, and remain calm.

## Pet and Livestock Safety

It can take a lot of planning to ensure **that your pets** and livestock get the best chance possible to survive a wildfire. If you have barns or other structures for the animals, treat them as you would your home. In other words, take steps such as clearing the area around them of debris and combustible materials.

### Livestock Tips



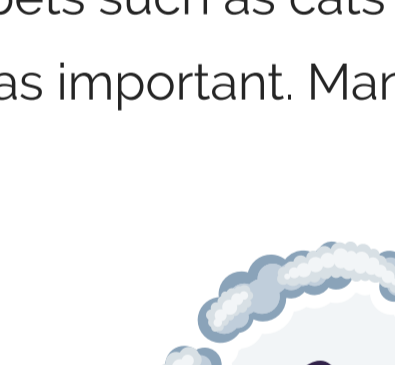
Have several evacuation options for the animals. Possible shelters include fairgrounds, equestrian centers, stockyards and friends' property.



Designate a cleared area in case you have no choice but to leave your livestock. Leave sufficient hay or food for three days in addition to water (power cuts may render automatic watering systems unusable).



Keep copies your animals' important records along with copies of your own records. Include registration papers, vaccination and medical records, photographs of the animals and your proof of ownership.



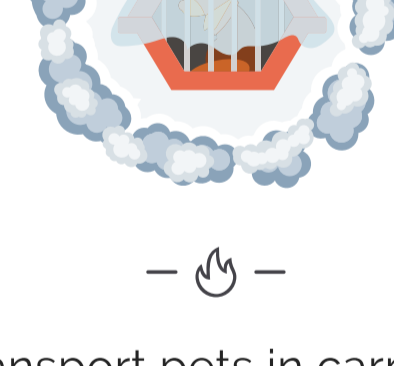
Create a disaster kit for the livestock. Include items such as food and water for three days, wire cutters, knife, shovel, water buckets, flashlights, hoof pick, leg wraps, first aid items.

Above all, evacuate your livestock as early as possible. Once you sense danger may be on the way, get out instead of waiting for officials to sound the alarm.

For pets such as cats and dogs, the preparations aren't as extensive as they are for livestock, but they're just as important. Many of the steps are the same.



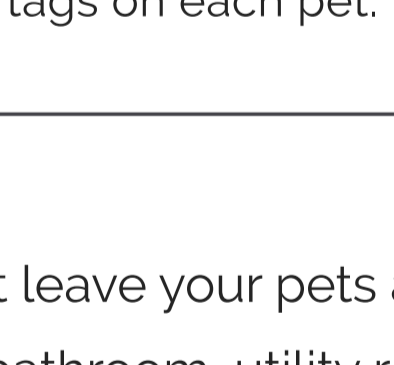
Have alternative places for your pets to go if they can't evacuate with you (like if you're not at home).



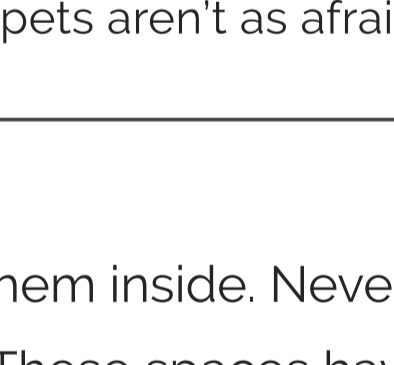
Have your neighbors' contact information.



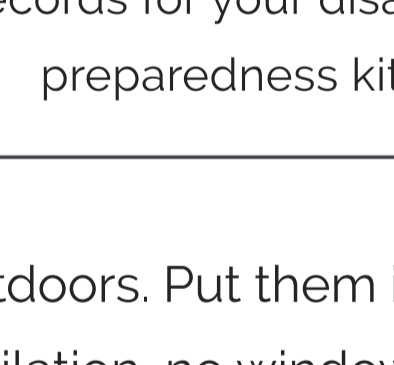
Check that any shelters you plan to evacuate to accept pets.



Put ID, rabies and license tags on each pet.



Transport pets in carriers, and use a light sheet or cover over the carrier so pets aren't as afraid.



Create digital and physical copies of important pet records for your disaster preparedness kit.

If you must leave your pets at home, bring them inside. Never leave them outdoors. Put them in a room such as a bathroom, utility room or garage. These spaces have sufficient ventilation, no windows and won't be too much of a pain to clean afterward.

## Safety After a Wildfire

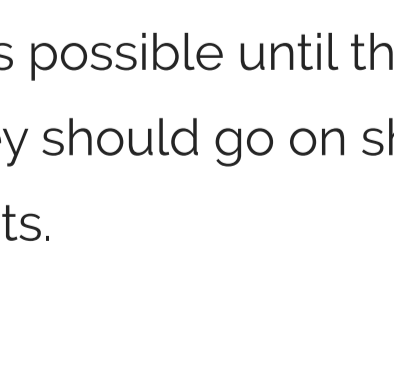
Listen to officials about when it's OK to return after a wildfire. If you attempt to go home before the all clear, you could end up dealing with smoldering ash, live embers, hot pockets that could spur another fire and water that is unsafe to drink.

When you do return, you're likely at high risk for inhaling unsafe dust particles. Get the debris and land around you wet, and wear **NIOSH certified-respirator dust masks** such as the N95. Also, try to use social media or texting to communicate with loved ones. Phone services may be overburdened, so reserve calls for emergencies.

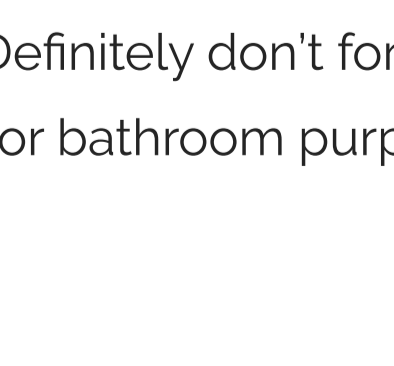
Interestingly, you may be at increased risk of flooding in the five years after a wildfire because these fires seriously change conditions on the ground. Mudflows and flash flooding could become more frequent, especially if the land has lost vegetation that will take a while to regrow. In fact, you may need to evacuate your home again due to floods or mudslides in the days, weeks or **months** after you return home. Heed these orders, and take out a flood insurance plan to further safeguard your property.

## If a Wildfire Affects Your Air Quality

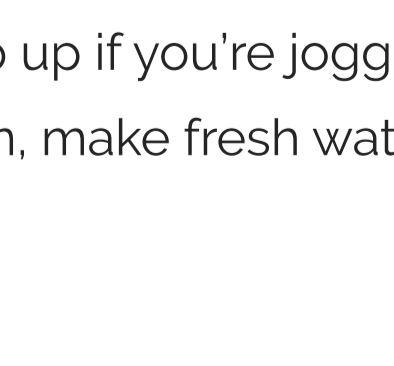
In many cases, wildfires burning an hour away or even many hours' drive from where you live can affect you. In fact, they may compromise **the air quality** in your town so severely that officials alert you not to venture outside. Here's what you can do in such situations.



Keep all windows and doors closed.



Use a portable air cleaner to keep the air quality in your house as high as possible.



Spend much of your time in a room or rooms where air from outside doesn't filter in.

If you have pets, take special care with those who are elderly, pregnant or young. Keep your pets inside as much as possible until the air improves. Definitely don't force dogs to keep up if you're jogging or biking. They should go on short walks only for bathroom purposes. In addition, make fresh water plentiful for your pets.

Birds in particular are susceptible to airborne particles. Keep them inside, and monitor them.

## Make It Your Aim to Evacuate

Evacuating as early as possible is your best bet for staying safe when wildfires rage around your home. To avoid lingering, set up plans early so that you, your loved ones and pets have multiple evacuation possibilities. Stay away from the area until authorities say it's fine to return, and be mindful of the potential risk of mudflows and floods.

## Additional Resources



**Firewise USA:** Home prep for wildfires, home fire sprinklers and much more



**Cal Fire:** Wildfire prevention, debris burning safety and other issues that can benefit residents of California and other states



**Landslide Hazards:** Identifying potential debris flow risks before a wildfire even occurs



**Wildfire Kit:** Assemble an emergency supply kit



**Leaving:** Pre-evacuation checklist