

READY, SET, GO!

YOUR PERSONAL WILDLAND FIRE ACTION GUIDE



READY, SET, GO!

Wildland Fire Action Guide

Saving Lives and Property
through Advance Planning



Fire is a constant threat in San Diego County, and drought, high temperatures in the summer and fall, combined with seasonal Santa Ana winds can lead to explosive fire growth.

In San Diego County, first responders are busy year-round fighting fires. When large fires threaten our community, local, state, federal, tribal, military and other agencies work together to save lives, protect property, and help those impacted by the disaster.

First responders can't do it alone though. Residents, especially those in the Wildland Urban Interface, play a critical role in being prepared for wildfires before, during, and after the next one strikes.

This guide has been modeled off of the Ready, Set, Go! program that is used locally, throughout California, and across the nation. This version is customized for San Diego County, with important local tips and information.

Use this guide to get "Ready" by making your home hardened against wildfire by using defensible space and smart fire resistant building and design choices. Create and practice a family disaster plan that includes storing essentials like food and water supplies, knowing how you'll meet up or communicate with each other, where you can safely evacuate to, and other important information.

Visit ReadySanDiego.org to register with AlertSanDiego to receive emergency alerts via email, text, cell and landline phones, and download the SD Emergency App to get the latest emergency updates delivered to your Android/iOS devices.



Be "Set" and prepared to leave when in danger by monitoring local media, viewing disaster updates on SDCountyEmergency.com, talking with 2-1-1 San Diego, and taking important steps to harden your home even further when you decide to evacuate.

Finally, be able to "Go" and go early, both to keep you and your family safe, and to make it easier for first responders to get into your community.

This guide is a great place to start as you take action to protect your family home, and community.

Tony Mecham, County Fire Chief

INSIDE

Wildland Fire Urban Interface	3
What is Defensible Space?	4
Making Your Home Fire Resistant	5
A Wildland Fire-Ready Home	6-7
Ready – Prepare Your Family – Checklist	8
Set – As the Fire Approaches – Checklist	9
Go – Leave Early – Checklist	10
Returning Home - Checklist	11
Safety Checklist	12

Photos courtesy of CAL FIRE, FEMA and ©Kevin Pack/K.E. Photography

This publication was prepared by the International Association of Fire Chief's RSG! Program and; the USDA Forest Service, U.S. Department of the Interior, and the U.S. Fire Administration. Special thanks to Insurance Institute for Business and Home Safety for program support. To learn more about the Ready, Set, Go! Program and its partners, visit www.wildlandfireRSG.org.

This publication was prepared under a grant from FEMA's Grant Programs Directorate, U.S. Department of Homeland Security. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of FEMA's Grant Programs Directorate or the U.S. Department of Homeland Security.

Living in the Wildland Urban Interface and the Ember Zone

Ready, Set, Go! begins with a house that firefighters can defend

Defensible Space Works!

If you live next to a naturally vegetated area, often called the Wildland Urban Interface, provide firefighters with 100 feet of defensible space to protect your home. The buffer zone you create by removing weeds, brush and thinning vegetation helps keep the fire away from your home and reduces the risk from flying embers. Firewise Communities and your local fire department's brush management guidelines provide valuable guidance on property enhancements.



A home within one mile of a natural area is in the Ember Zone. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildland fire.



What is Defensible Space?



Defensible space is the required space between a structure and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildland fire to a structure. It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildland fire conditions. For more information about defensible space zones and preparedness techniques within each, visit ReadySanDiego.org/wildland-fire

ZONE ONE

Zone One extends 50 feet from your home.

- Must be permanently irrigated to maintain green and healthy plants.
- Is primarily low-growing plant material, with the exception of trees. Plants shall be low-fuel and fire-resistive.
- Trim tree canopies regularly to remove dead wood and keep branches a minimum of 10 feet from structures, chimney outlets and other trees.
- Remove leaf litter (dry leaves/pine needles) from yard, roof and rain gutters.
- Relocate woodpiles and other combustible materials into Zone Two.
- Remove combustible material and vegetation from around and under decks.
- Remove or prune vegetation near windows.
- Remove "ladder fuels" (low-level vegetation that would allow the fire to spread from the ground to the tree canopy). Create a separation between low-level vegetation and tree branches by reducing the height of the vegetation and/or trimming low branches.

ZONE TWO

Zone Two extends 50 to 100 feet from your home.

- Minimize the chance of fire jumping from plant to plant by removing dead material and removing or thinning vegetation seasonally. The minimum spacing between vegetation is three times the dimension of the plant.
- There should be no permanent irrigation in Zone Two.
- Remove "ladder fuels."
- Cut or mow annual grass down to a maximum height of 4 inches.
- Trim tree canopies regularly to keep branches a minimum of 10 feet from other trees.

What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding a home are what gives it the best chance to survive a wildland fire. Embers from a wildland fire can find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildland fire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildland fire.



ROOFS

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain gutters are all points of entry.

EAVES

Embers can gather under open eaves and ignite exposed wood or other combustible material.

VENTS

Embers can enter the attic or other concealed spaces through vents and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents.

WALLS

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite.

WINDOWS and DOORS

Embers can enter through open windows and gaps in doors, including garage doors. Plants or combustible storage near windows can ignite from embers and generate heat that can break windows and/or melt combustible frames.

BALCONIES and DECKS

Embers can collect in or on combustible surfaces or the undersides of decks and balconies, ignite the material and enter the home through walls or windows.

To harden your home further, consider protecting your home with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start in your home.

Tour a Wildland Fire Prepared Home

Home Site and Yard: Ensure you have at least a 100-foot radius of defensible space (thinned vegetation) around your home. Note that even more clearance may be needed for homes in severe hazard areas. This means looking beyond what you own to determine the impact a common slope or neighbors' yard will have on your property during a wildland fire.

Cut and remove dry weeds and grass before noon when temperatures are cooler to reduce the chance of sparking a fire.

Landscape with fire-resistant plants that have a high moisture content and are low-growing.

Keep woodpiles, propane tanks and combustible materials away from your home and other structures such as garages, barns and sheds.

Ensure that trees are far away from power lines.

Inside: Keep working fire extinguishers on hand. Install smoke alarms and carbon monoxide detectors on each level of your home and near bedrooms. Test them monthly and change the batteries twice a year.

Address: Make sure your address is clearly visible from the road.

Roof: Your roof is the most vulnerable part of your home because it can easily catch fire from wind-blown embers. Homes with wood-shake or shingle roofs are at high risk of being destroyed during a wildland fire.

Build your roof or re-roof with fire-resistant materials such as composition, metal or tile. Block any spaces between roof decking and covering to prevent ember intrusion.

Clear pine needles, leaves and other debris from your roof and gutters.

Cut any tree branches within ten feet of your roof.

Vents: Vents on homes are particularly vulnerable to flying embers.

All vent openings should be covered with $\frac{1}{8}$ inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Attic vents in eaves or cornices should be baffled or otherwise protected to prevent ember intrusion (mesh is not enough).

Windows: Heat from a wildland fire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.

Install dual-paned windows with the exterior pane of tempered glass to reduce the chance of breakage in a fire.

Limit the size and number of windows in your home that face large areas of vegetation.

Walls: Wood products, such as boards, panels or shingles, are common siding materials. However, they are combustible and not good choices for fire-prone areas.

Build or remodel with fire-resistant building materials, such as brick, cement-fiber board, masonry or stucco.

Be sure to extend materials from foundation to roof.



Garage: Have a fire extinguisher and tools such as a shovel, rake, bucket and hoe available for fire emergencies.

Install a solid door with self-closing hinges between living areas and the garage. Install weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

Driveways and Access Roads: Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house.

Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic.

Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

Trim trees and shrubs overhanging the road to a minimum of 13½ feet to allow emergency vehicles to pass.

Non-Combustible Fencing: Make sure to use non-combustible fencing to protect your home during a wildland fire.

Non-Combustible Boxed In Eaves: Box in eaves with non-combustible materials to prevent accumulation of embers.

Raingutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

Water Supply: Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property.
If you have a pool or well, consider a pump.

Chimney: Cover your chimney and stovepipe outlets with a non-flammable screen of ½ inch wire mesh or smaller to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

Decks and Balconies: Decks, balconies, and other floor projections and attachments must be of one – or a combination – of the following:

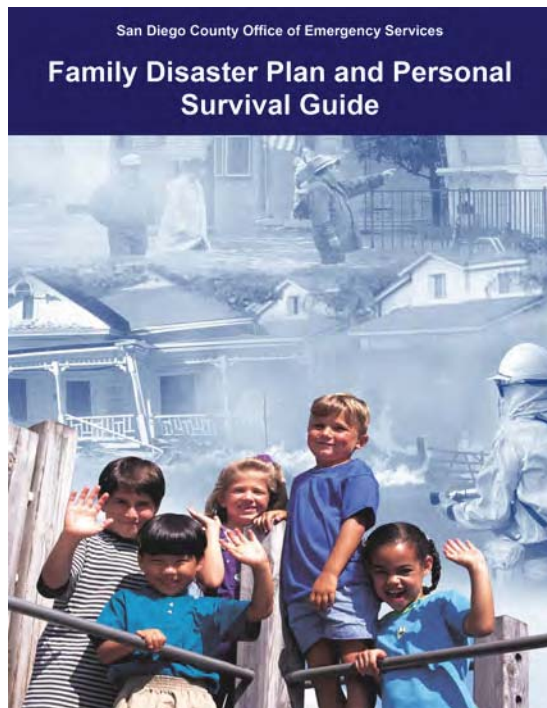
- non-combustible construction (e.g., concrete, metal)
- protected by one-hour fire-resistive material (e.g., stucco, cement-fiber board, ceramic tile, deck surface listed by approved evaluation service as one-hour-rated or Class A roof covering)
- approved fire-retardant treated materials (factory-applied fire retardant, pressure-treated lumber, listed for exterior use, installed per listing)
- heavy timber construction (minimum 4x8 joists, 4x10 or 6x8 beams, 3x ledgers, and 6x6 columns/posts)
- alternative decking materials per County Building Code 92.1.709A.1.4

READY, SET, GO!

Create Your Own Action Guide

Now that you've done everything you can to protect your house, it's time to prepare your family. Your **Wildland Fire Action Guide** must be prepared well in advance of a fire. Include *all* members of your household. Use these checklists to help you gain a situational awareness of the threat and to prepare your Wildland Fire Action Guide. For more information on property and home preparedness before a fire threat, review the preparedness checklist on the Firewise Communities website, www.firewise.org

Ready – Preparing for the Fire Threat



For a more extensive survival guide, please visit: ReadySanDiego.org/make-a-plan

- ☐ Create an in-depth family disaster plan at ReadySanDiego.org
- ☐ Register to receive emergency notifications on phone, cell, text, and email for your area. Sign up at AlertSanDiego.org
- ☐ Have fire extinguishers on hand
- ☐ Ensure that your family knows the location of your utility shut-off controls
- ☐ Plan and practice several different evacuation routes
- ☐ Designate an emergency meeting location
- ☐ Assemble an emergency supply kit (water, food, medicine)
- ☐ Maintain a list of emergency contact numbers
- ☐ Have a portable radio



All the information in your hands when you need it! Get the SD Emergency App for Android and iOS!



Find out how to volunteer, and get the most up-to-date disaster information! Call 2-1-1



Visit ReadySanDiego.org for all your preparedness needs! Get a plan, get the app, get informed!

Set – Situational Awareness when a Fire Starts

- ☐ Alert family and neighbors
- ☐ Ensure that you have your emergency supply kit
- ☐ Stay tuned to media, visit: SDCountyEmergency.com
- ☐ Close all windows and doors, leaving them unlocked
- ☐ Remove flammable window shades and curtains
- ☐ Move furniture to the center of the room
- ☐ Turn off pilot lights and air conditioning
- ☐ Leave inside and outside lights on so firefighters can see your house through smoke
- ☐ Bring patio furniture, children's toys, etc. inside
- ☐ Turn off propane tanks and other gas at the meter
- ☐ Don't leave sprinklers on or water running
- ☐ Back your car into the driveway to facilitate a quick departure

- ☐ Cover attic and ground vents with pre-cut plywood or commercial covers
- ☐ Call 2-1-1 for all non-emergency inquiries or visit: 211SanDiego.org

IF YOU ARE TRAPPED: SURVIVAL TIPS

- ☐ Call 9-1-1
- ☐ Remain inside your home until the fire passes
- ☐ Shelter away from outside walls
- ☐ Bring garden hoses inside the house so embers don't destroy them
- ☐ Patrol inside your home for spot fires and extinguish any you find
- ☐ Wear long sleeves and long pants made of natural fibers such as cotton
- ☐ Stay hydrated
- ☐ Ensure you can exit the home if it catches fire (remember if it is hot inside the house, it is four to five times hotter outside)
- ☐ Fill sinks and tubs for an emergency water supply
- ☐ Place wet towels under doors to keep smoke and embers out
- ☐ After the fire has passed, check your home and roof. Extinguish any fires, sparks or embers
- ☐ Check inside the attic for hidden embers
- ☐ If there are fires that you cannot extinguish with a small amount of water or in a short period of time, call 9-1-1



Go – Leave Early

By leaving early, you give your family the best chance of surviving a wildland fire. You also help firefighters by keeping roads clear of congestion.

WHEN TO LEAVE

Do not wait to be advised to leave if there is a possible threat to your home or evacuation route. Leave early enough to avoid being caught in fire, smoke or road congestion. If you are advised to leave by local authorities, do not hesitate!

MEETING LOCATION

Travel to a predetermined location. It should be a low-risk area, such as a well-prepared neighbor or relative's house, a shelter or motel, etc.

HOW TO GET THERE

Know several travel routes out of your community in case one route is blocked by the fire or by emergency vehicles.

WHAT TO TAKE

Take your emergency supply kit containing your prepared family and pet's necessary items.



The County of San Diego Office of Emergency Services has a free, printable, All Hazards Family Disaster Plan and Survival Guide at: ReadySanDiego.org/make-a-plan

Here is a brief checklist to get your emergency supply kit started.

- ☐ Three-day supply of water (one gallon per person per day)
- ☐ Non-perishable food for all family members and pets (three-day supply)
- ☐ First aid kit
- ☐ Flashlight, battery-powered radio, and extra batteries
- ☐ An extra set of car keys, credit cards and cash or traveler's checks
- ☐ Sanitation supplies
- ☐ Extra eyeglasses or contact lenses
- ☐ Important family documents and contact numbers
- ☐ Map marked with evacuation routes
- ☐ Prescriptions or special medications
- ☐ Family photos, valuable and other irreplaceable items that are easy to carry
- ☐ Personal computers, hard drives, disks and flash drives
- ☐ Chargers for electronic communication devices

Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.

Why can't I immediately return home?

Although a fire has been contained or extinguished there are post-hazard concerns that must be addressed before re-entry into the impacted area(s) may be permitted. Priorities for re-entry include:

1. Safety
2. Security
3. Damage Assessment
4. Restoration of Services
5. Communication of Information

The impacted areas must be thoroughly investigated to ensure it is safe for residents to return and that services have been restored. You will be notified of the re-entry status through: *emergency broadcast radio, television, internet www.SDCountyEmergency.com, 2-1-1, community briefings, and informational updates at shelters.*

Returning Home

After a disaster, **DO NOT attempt to return to your home or cross any barriers or caution tape without permission from law enforcement officials.** When returning home, be cautious in your neighborhood and watch out for:

- Emergency personnel still operating in the area.
- Power lines lying on the ground.
- Small fires that may flare up without warning.
- Ash pits, which are holes filled with hot ash created by burned trees.
- Damaged buildings or debris (including glass, nails, etc.)
- Charred power poles and trees that may be unstable and fall.

Take the following precautions when attempting to enter your house:

POWER: <i>If a person or piece of equipment comes in contact with an electric line, or if a line is down or broken.</i> ☐ Call 9-1-1. ☐ If you see an electrical fire, fight it with a dry CO(2) extinguisher. ☐ If possible, shut off the power. ☐ Don't touch the person or any equipment involved. The line may still be energized and dangerous. ☐ Freeing someone from energized power lines or equipment should only be attempted by a qualified SDG&E employee or a trained rescuer such as a fire fighter. ☐ Always assume that power lines are energized. ☐ Do not smoke or attempt to light anything. Use a flashlight instead.	GAS: ☐ Check to see if your gas utility is working properly. If you smell gas, leave your home immediately, and call (24/7) SDG&E at 1-800-411-7343. ☐ DO NOT light a match, candle, or cigarette. ☐ DO NOT turn electrical devices on or off, including light switches. ☐ DO NOT start an engine or use any device, including a telephone, which could cause a spark. ☐ DO NOT attempt to control the leak or repair the damaged pipe or meter. Do not use or turn off any equipment that could cause a spark.
☐ Check for burning embers on roofs, gutters, porches, attic, crawlspace, and throughout your property for several days after a wildfire.	☐ Check for any structural damage before entering your home. If you are uncertain, have your home professionally inspected before returning.
☐ Do not smoke or attempt to light anything as there could be flammables or leaking gases. Use a flashlight instead.	☐ Open windows and doors to allow airflow, which will help dry out of any water damage areas.

San Diego Gas & Electric can be reached at 1-800-411-7343 or SDGE.com/customer-service/contact-us
For more information on damage assessment visit the County's Recovery page at SDCountyRecovery.com.

Fire Action Guide

Out of Area Contact: _____ Phone #: _____

Work: _____ School: _____ Other: _____

Evacuation Routes: _____

Meeting Location: _____ Location of Supply Kit: _____

Information: SDCountyEmergency.com 211SanDiego.org SD Emergency App

You can create a more in-depth plan for free at: ReadySanDiego.org/make-a-plan



READY, SET, GO!

Safety Checklist

Tips To Improve Family and Property Survival During A Wildland Fire

Home

1. Does your home have a metal, composition, tile or other non-combustible roof with capped ends and covered fascia?
2. Are the rain gutters and roof free of leaves, needles and branches?
3. Are all vent openings screened with $\frac{1}{8}$ inch non-combustible, corrosion-resistant metal mesh?
4. Are approved spark arrestors on chimneys?
5. Does the house have non-combustible siding material?
6. Are the eaves "boxed in" and the decks enclosed?
7. Are the windows dual-paned or tempered glass?
8. Are decks, porches and similar areas made of non-combustible material and are they free of easily combustible material?
9. Is all firewood at least 30 feet from the house?

Yes

No

☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐

Defensible Space

1. Has dead vegetation been removed from the defensible space zones around your home? (Consider adding distance due to slope of property.)
2. Is the required separation between shrubs maintained?
3. Have ladder fuels been removed?
4. Is there a clean and green area extending at least 50 feet from the house?
5. Is there a non-combustible area within five feet of the house?
6. Is the required separation between trees and crowns maintained?

Yes

No

☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐

Emergency Access

1. Is the home address plainly legible and visible from the street?
2. Are trees and shrubs overhanging the street trimmed to 15½ feet?
3. If your home has a long driveway, does it have a suitable turnaround area?

Yes

No

☐	☐
☐	☐
☐	☐

