

# Mitigation measures

Protect Your World From Natural Disasters



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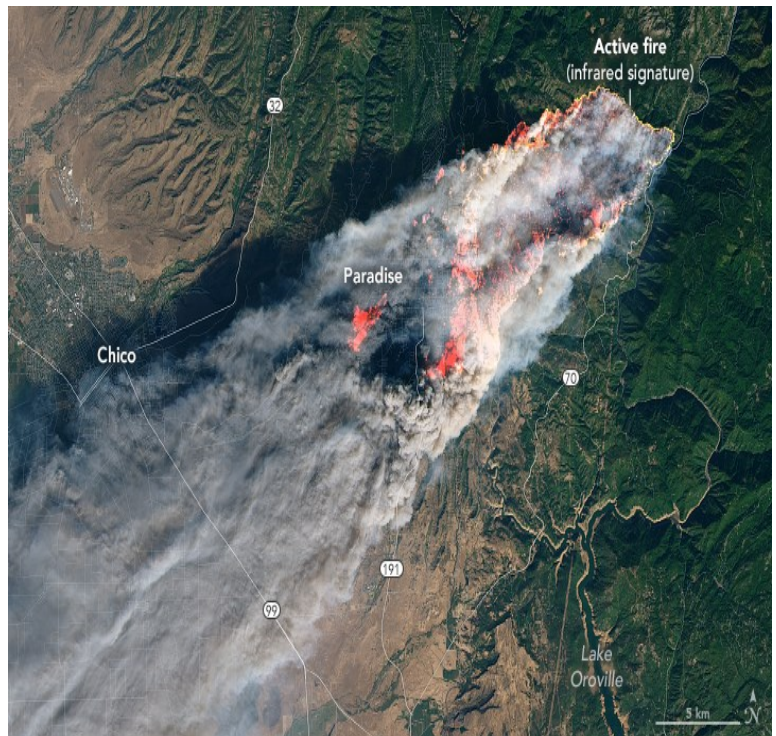


**FEMA**

## Wildfire Smoke Odor Removal

If wildfire smoke has entered your home the lingering odor will persist due to tiny microscopic particles that cling to walls, furniture, floors, clothing, etc. Removing the smell of smoke can be a difficult job involving time, effort, and money. If your home was exposed to wildfire smoke and ash, it may be best to get the structure and contents properly inspected, tested, cleaned/treated and restored to pre-exposure condition. Damage to your home and possessions by smoke and ash may be covered in your home policy. Be sure to check with your agent.

Since smoke damage can be both visible and invisible to the naked eye it is best to have qualified experts do the inspection, testing, cleaning and restoration. Burning scented candles and perfumed aerosols are often used to remove smoke odor from a house. These remedies most often only mask the odor temporarily. Ventilation can help to remove some of the smell, but it only dilutes the odor and does not remove the smell permanently.



To remove smoke odor, it is important to get to the source of the problem. The smoke particles must be removed by cleaning since smoke particles tend to get into the smallest cracks and areas. This means that you may be left with lingering odors even after cleaning your house from top to bottom. Removing all sources of odors is the only way to ensure the scent will not linger.

Several publications offer tips on removing smoke odors (see Resources, below). Here are a few of the useful ideas:

- ◆ Wash and scrub all exterior surfaces including walls, walks, drives, decks, windows, and deck screens, etc.
- ◆ Wash and disinfect all interior walls and hard surfaces with mild soap or other appropriate cleaning solutions or products, and rinse thoroughly. Don't forget the inside of cabinets, drawers, and closets.
- ◆ Launder or dry clean all clothing. Getting the smoke smell out of clothing can be difficult. Some suggest using 1 cup of vinegar in the wash cycle, along with the usual detergent. One wash may not remove the smoke odor, so check for smoke odor. If the odor is still present, wash again using the same process. Smell the items each time after they are washed. If they still smell like smoke, wash them until the odor is gone. If you dry them in a dryer when they smell like smoke, you may set the odor in the clothing.
- ◆ Wash, dust, or otherwise clean all household items, including knick-knacks.

- ◆ Disinfect and deodorize all carpets, window coverings, upholstered furniture, and mattresses with steam or other appropriate equipment. Upholstery, fabric window treatments, etc. can be spray-treated with deodorizing products available at most supermarkets, but do not use odor-masking sprays. Keep in mind, though, that if the smoke odor has permeated into your carpets, draperies, furnishings, etc., there may be little that can be done to eliminate the smoke odor unless these items are removed or replaced.
- ◆ Have heating, ventilating, and air-conditioning units and all ductwork professionally cleaned to remove soot, ash, and smoke residue. Change filters when you first return to the premises and at least once a month for the first year.
- ◆ If aerial fire retardant or firefighting foam residue is present on the house and/or automobiles, use a mild detergent and brushes to scrub and dilute the dried residue and flush it from the surfaces; rinse with clean water. A follow-up with pressure washing may be beneficial but will not replace scrubbing to remove the residue.
- ◆ Ash and soot on the ground and vegetation in the vicinity will continue to generate smoke odors and airborne particles when disturbed by air movement. Until the ash and soot are diluted and absorbed by the environment, indoor mechanical air filtration may help minimize the uncomfortable and potentially health-threatening impact of these pollutants.
- ◆ White vinegar cuts through odors naturally. Try wiping down furniture, washable walls, floors, etc. with white vinegar. Also, try placing several bowls of vinegar around the room with the smoke damage, leaving them there for several days. If you can't stand the smell of vinegar, try mixing a bit of lavender oil into the bowls to help cut the odor of the vinegar.
- ◆ Baking soda is another natural odor-absorber. Try sprinkling liberal amounts of baking soda over furniture, floors, etc. Leave a few bowls of baking soda around the room for several days to help absorb the odors.
- ◆ Some odor-reducing products (e.g. Febreze) use a chemical compound called cyclodextrin, a sugar-like substance that absorbs odors.
- ◆ Activated Charcoal, often used as a detoxifying agent, is also a natural odor absorbent. Placing bowls of activated charcoal (powdered form) around your room may help to absorb the smoke odors.
- ◆ In warmer weather, leave your windows and doors open as much as possible. Fresh air will eventually dissipate the smell of smoke.

### Resources:

**Federal Emergency Management Agency (FEMA) Tips for Smoke Removal and Fire Cleanup**  
<https://www.fema.gov/news-release/2003/07/25/tips-smoke-removal-and-fire-cleanup>

**University of Missouri Extension: After the Fire is Out: Cleaning Household Textiles and Clothing**  
<http://extension.missouri.edu/p/GH145>

**University of Florida Extension: "Handling Smoke Damage after a Fire—Getting Soot and Smoke Out"**  
<http://disaster.ifas.ufl.edu/pdfs/chap13/d13-17.pdf>

**Texas A&M Extension: "How to Remove Smoke Smell from a Home"**  
<http://texashelp.tamu.edu/004-natural/pdfs/how-to-remove-smoke-smell-from-a-home.pdf>

**Iowa State Extension: "Quick N' Easy Stain Removal"**  
<http://www.extension.iastate.edu/publications/pm858.pdf> (smoke and soot on page 6).

**Cornell University FSAD: "Removing Stains at Home"**  
<http://www.human.cornell.edu/fsad/outreach/upload/removingstains.pdf>