



Cleaning Up After a Forest Fire

Coming home after a mandatory evacuation can be a relief and also a lot of work if your home has suffered excessive smoke infiltration or if soot/ash has been deposited in your home or if there has been a disruption in power or water services. The smoke will infiltrate your home and the odor will stay because the smoke particles are so small they can hide in the small spaces of cloth and wood. Removing the smell of smoke is a big task. The following information should provide you some guidance on how and what to clean in your home as well as offer you some safety tips for personal protection.

A note of caution: Using room sprays or scented candles or scented oil burners will only mask the smell of smoke and can cause breathing difficulties to those exposed to the perfumes over time.

Getting prepared

- Before starting any cleanup be sure it is safe to be in your home. Ensure that the evacuation orders have been lifted and if there was any structural damage to the home that it has been assessed as safe.
- Have appropriate **personal protective equipment** available.
- If you will be disturbing soot, a face mask may be required and gloves, long sleeved shirts and pants to protect your skin. You may wish to use an apron to protect your clothes as well.
- If you do get soot or ash on your skin, wash it off as soon as possible.
- Open all windows and doors (preferably using intact screens) to start ventilating your home. You may wish to use fans as well to increase the air flow.
- Limit the movement around your home if there is soot present so you don't imbed it into cloth surfaces (carpets and furniture) If soot has been deposited, it will be necessary to deal with it **before** cleaning and odor relief. Soot is oil and should be removed as much as possible with a powerful vacuum. On sooty fabrics, do not use a vacuum or any machine or attachment with brushes or beater bars.

Getting started

- **After ventilating the area**, start by removing any soot from the surfaces. Start with the carpets and upholstered items like curtains, so the soot isn't further imbedded into the fabric. You can

use a vacuum for this as long as it doesn't have a beater bar that "puffs" the soot back into the air to be inhaled or if it can be vented to the outside.

- Hold the vacuum nozzle slightly above the surface and let it suck in the soot.
- Once the soot is removed from the carpet, you can use a rotary carpet cleaner (with brushes) to further remove the odors.
- For **walls** with painted gyproc, wallboard, wall paper or wood with soot present, it is recommended to use a dry sponge to remove as much soot as possible. This should prevent the soot from being transferred deep into the surface where it may look like a stain later.
- For all other **hard surfaces** like countertops, toilets, appliances, basins, vinyl and ceramic flooring, wipe down with hot soapy water.
- Remember to clean inside cupboards and drawers.
- Determine which items are the most valuable and clean them in order. Some items may have come with specific cleaning instructions from the manufacturer, like a tv. Follow the manufacturer's instructions for chemical use.
- Smoke odors can remain in **fabrics/clothes** for a very long time. Soaking cloth overnight with detergent or adding bleach to the wash cycle (if it is safe to do so), before a wash cycle may help. Using 1 cup of vinegar in the wash cycle, along with detergent may help remove odours. One wash may not remove the smoke odor, so check for smoke odor before drying the clothes. Continue to wash them without drying until the odour is gone.
- If you dry the clothes with the odour still in them you will likely "set" the smell into the cloth permanently.

You may wish to cover cleaned surfaces with clean sheets or towels so they do not become dirty again as you continue cleaning other items and areas.

Other Items for Consideration

- Your community may be on a Boil Water Advisory, follow the instructions of the advisory.
- For those with **breathing concerns such as asthma or COPD** it may be very beneficial to have a HEPA (High Efficiency Particulate Arrestance) filter on your vacuum or on an air purifier in the home to assist in the removal of air borne particles such as smoke, dust mites, pet dander and pollen.
- If your **power services** was disrupted, you will likely have spoiled food in your **fridge** (unless the power was only off for approximately 2 hours). If the power was off for more than two hours, the food will be unsafe and need to be discarded. If your power was off for more than a day, the foods in your **freezer** likely thawed and may be rotten and need to be discarded as well.
- Your furnace duct work may require professional cleaning if a lot of soot was pulled into your home from the outside air. Consider having your home assessed by a professional cleaning company.

- Change your **air filters** on all appliances that have them when you first return to the premises and at least once a month for the first year. (furnaces, air conditioners and air purifiers)
- Check your **smoke detectors** to ensure they are working correctly, they may need battery replacement.
- Flush your **water lines**, especially the hot water if you have been out of the home for some time.

Odour removers

Vinegar, baking soda and activated charcoal. White household vinegar can remove some odour naturally. Using undiluted vinegar to wipe down hard surfaces like floors, tiles, countertops etc. can help eliminate some of the smoke odor. Leaving out bowls of household vinegar, baking soda or activated charcoal throughout your home may also help eliminate some of the smoke odours. Activated charcoal can be more difficult to find and purchase.

Febreeze. Febreeze, is a well-known odour reducer product sold in grocery - type stores. Its active ingredient is a sugar-like substance that absorbs odors. Using Febreeze may help to reduce smoke odor.

Fresh Air. Fresh air is the best way to remove odor. Keep windows and doors open as much as possible.

Ozone Generators. Ozone generators are the next level for odour removal. Although they can work very well they are expensive pieces of equipment, and will not completely remove the odor.

REFERENCES:

How to Remove Smoke and Smell From a Home, Texas A&M Agrilife Extension.

Handling Smoke Damage after a Fire – Getting Soot and Smoke Out, University of Florida, Cooperative Extension Service, Institute of Food and Agricultural Services.