

CLEANER AIR SHELTER AT HOME

A home “cleaner air shelter” is an entire home, or area of the home with filtration that is suitable for reducing wildfire smoke exposure. Use may be part time (e.g., several hours per day) or full time (e.g., day and night) for the duration of the smoke event.

The combination of closing doors and windows and running a portable HEPA filter that is the appropriate size for the room may be sufficient to lower the smoke concentration and relieve symptoms. In extreme smoke situations a cleaner air shelter may be required. The objective is to seal in the good air by sealing any gaps and avoiding allowing bad air in. Air will move from high pressure areas to low pressure through any opening. Pressure differences from wind and temperature are hard to control. Appliances that remove air from the home will create a negative pressure that will pull in outside air and should not be used.

HOW TO MAKE A CLEANER AIR SHELTER

- Close all windows and doors.
- If you have portable air cleaners with HEPA filters, turn them on. Many standard air conditioning units also have filters inserted or can have them inserted.

For portable air cleaners: Ensure proper sizing of the unit, the Clean Air Delivery Rate rating for tobacco smoke is the most relevant to wildfires

- Turn off exhaust fans, window air conditioners, clothes dryers vented outside and combustion heaters in the home. A central air conditioning system can be used, keep the fresh-air intake off to prevent smoke from getting inside.
- Tape periphery of doors, unless there are weather seals. The effectiveness of the seals can be checked by determining whether air moves through at the edges. This movement of air may be seen by observing the path of a small puff of smoke such as from a match or by observing the movement of a small strip of paper or plastic.
- Take a portable phone or cell phone into the cleaner air shelter for emergency communications.
- Continue to check the radio or local wild fire information source for emergency information.
- Carbon dioxide is released when we exhale and produced by some combustion appliances. Use a carbon monoxide detector in the shelter, especially if it is tightly sealed and the time in the shelter is prolonged.
- Be mindful of the heat. Cool the shelter to a comfortable temperature or seek shelter in a cooler place.
- Avoid producing other air pollution such as cigarette smoke, burning candles, gas stoves and heating (especially kerosene, gas, propane, or wood)
- When air quality improves, even for a short period, it is important to air out the shelter. Clean surfaces with a damp cloth or mop to remove settled PM and vacuum with a HEPA filter-equipped vacuum.

SUPPLIES FOR THE CLEANER AIR SHELTER

- Portable HEPA filter that is appropriately sized for the room and spare filters.
- Duct tape for sealing doors and securing plastic over vents and windows
- Pre-cut plastic sheeting to fit over supply and return vents (may be for windows as well if not airtight)
- Battery operated radio with spare batteries
- Flashlight with spare batteries
- Drinking water
- First aid kit