

# CLEAN INDOOR AIR DURING WILDFIRES

## How to make your own HEPA filter

Smoke and ash from wildfires contain tiny particles known as particulate matter. These particles harm the lungs and heart, and can cause coughing, wheezing, difficulty breathing, chest pain, nausea, and in severe instances, premature mortality. Kids, seniors, pregnant women, and people with heart or lung disease are especially sensitive. The best protection against wildfire smoke is to **stay indoors** as much as possible when smoke is present. Before the next wildfire, take steps to ensure your family will have safe indoor air quality. Assembling a DIY version of an air purifier can be a more affordable option. This version has been shown to reduce harmful particulate matter indoors similarly to a HEPA purifier.

### STEP 1: Materials

Purchase the following items from hardware stores or online retailers.



Duct tape

20"x20" air filter  
(MERV rating 13 or higher)



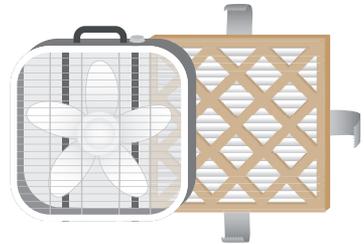
20" x 20" box fan



### STEP 2: Assemble

Duct tape the air filter to the back of the box fan.

Check the filter for the direction of the air flow (*marked on the sides of the filter*).

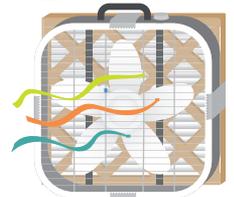


### STEP 3: Maintenance

Replace the filter more frequently if used during a wildfire.

As needed, disassemble the box fan to wipe away any accumulated dirt.

Check your windows and doors to make sure the room is sealed tightly so smoke from the outdoors does not get pulled inside.



### For safety, follow these precautions:

- Don't leave the device unattended.
- Turn off the fan while sleeping.
- When the fan is modified in this way, use the device as an air cleaner, **not as a fan to cool your home.**