

Wildfire Smoke and Kids

Stephanie Holm, MD MPH

UCSF

University of California
San Francisco



Berkeley
UNIVERSITY OF CALIFORNIA

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- How do I know if the air is bad for my child?
- What can I do about it?



Air Quality Index

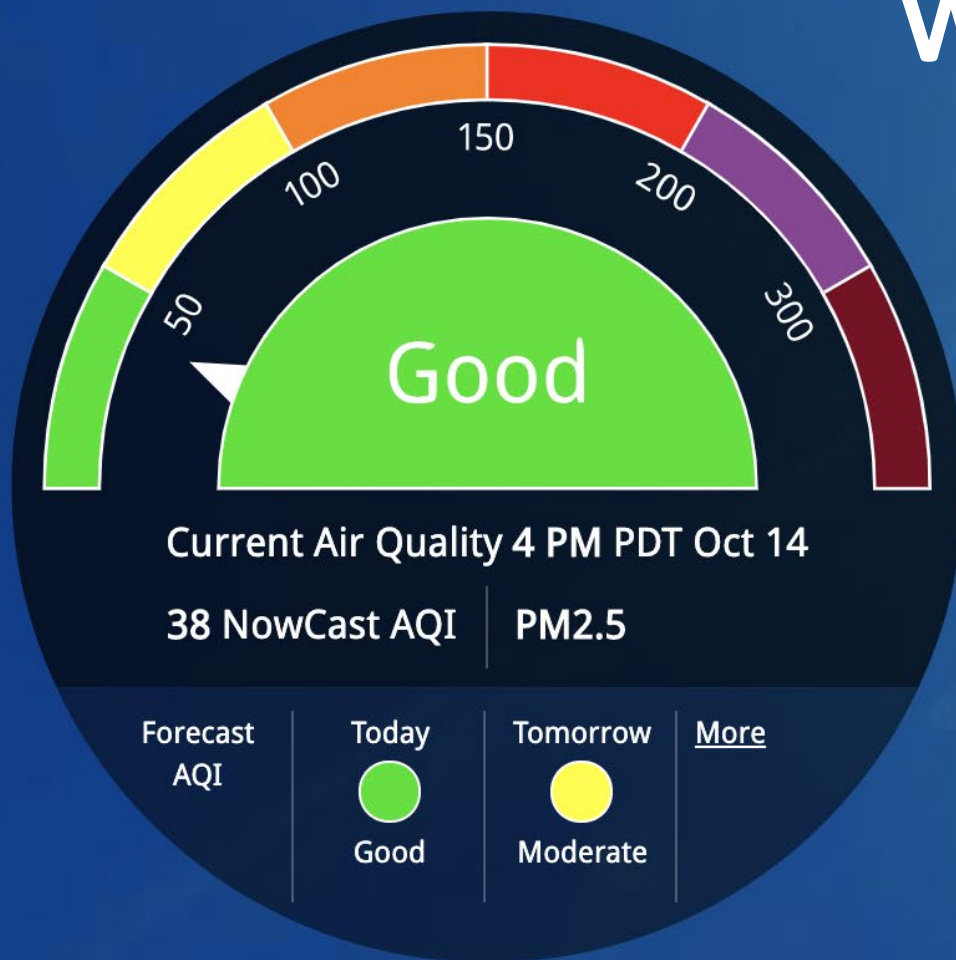
AQI

Índice de la Calidad del Aire

Daily AQI color Colores	Levels of Concern Niveles preocupantes para la salud	Values of Index Valores del Índice de la calidad del aire (AQI)
Green Verde	Good Buena	0-50
Yellow Amarillo	Moderate Moderada	51-100
Orange Naranja	Unhealthy for Sensitive Groups Insalubre para grupos sensibles	101-150
Red Rojo	Unhealthy Insalubre	151-200
Purple Morado	Very Unhealthy Muy insalubre	201-300
Maroon Rojo granate	Hazardous Peligrosa	301-500

www.airnow.gov

AQI Legend



ZIP Code, City, or State 

San Francisco, CA

San Francisco Reporting Area

Monitors Near Me

Recent Trends

fire.airnow.gov

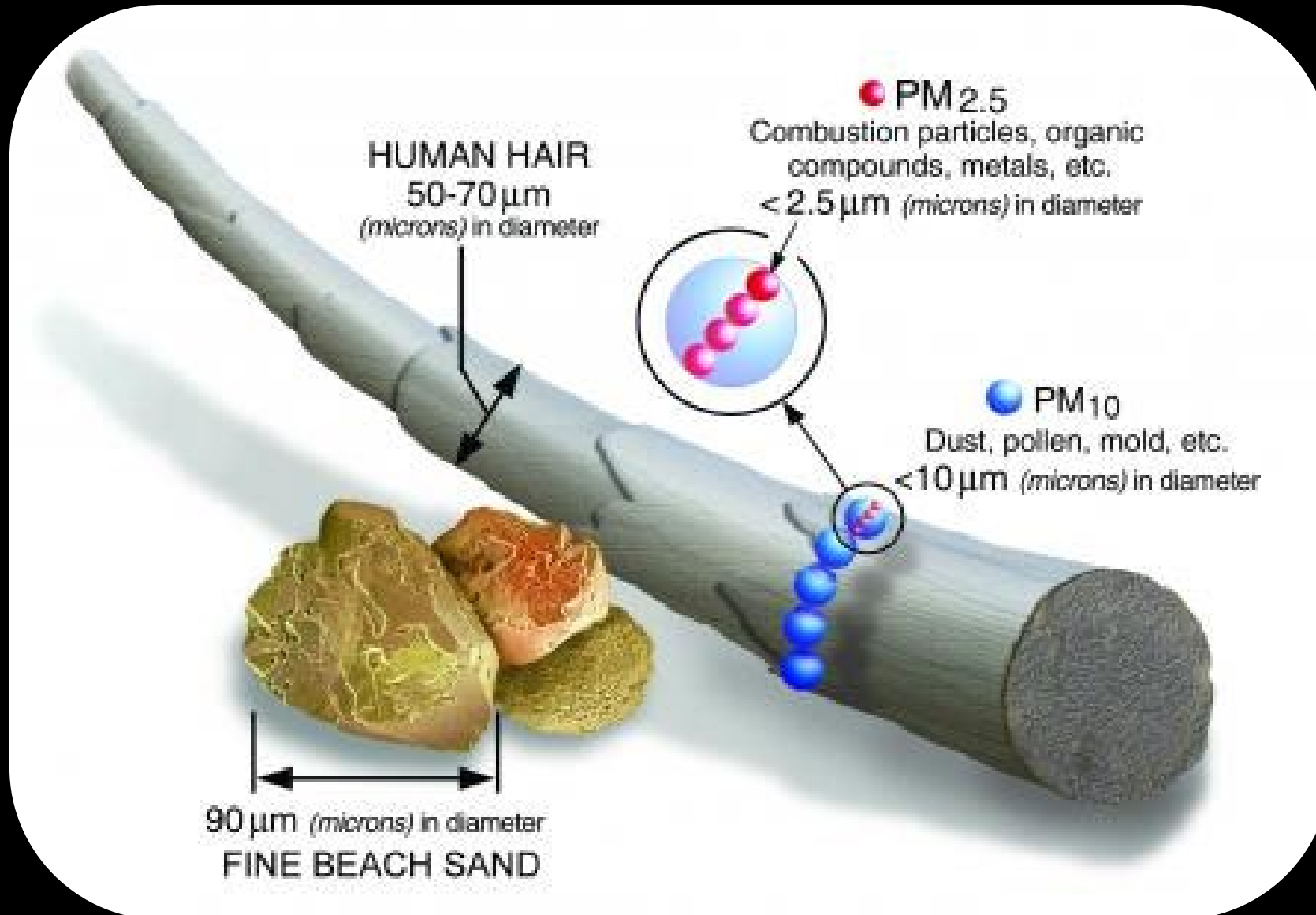


EPA Conversion for Purple Air Sensors

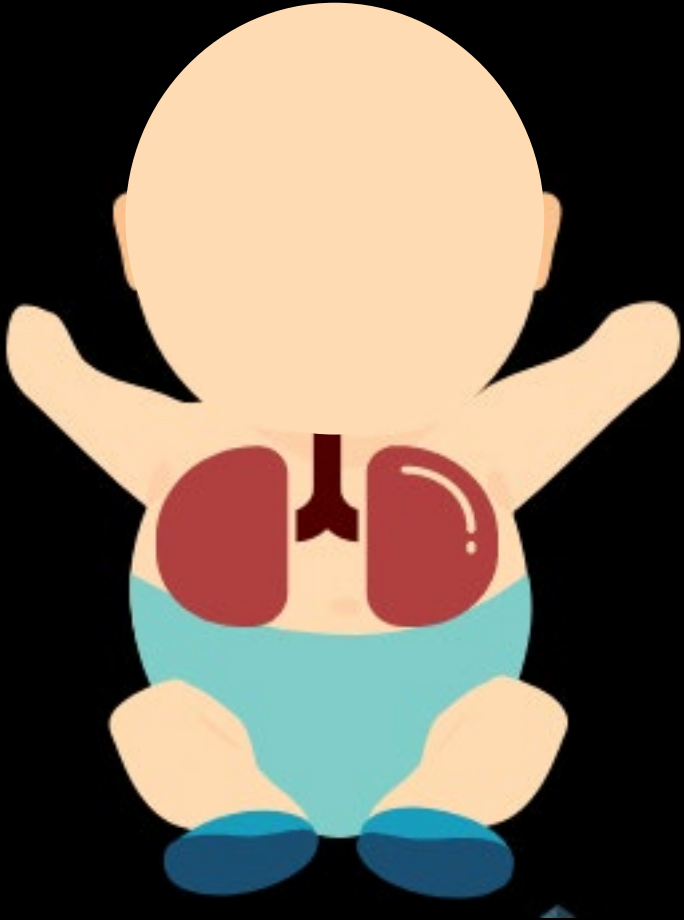
www.purpleair.com/map

The screenshot shows the PurpleAir map interface. At the top left is the PurpleAir logo. A search bar is visible. The main map area displays numerous sensor locations across the United States, each represented by a colored circle with a numerical value. The colors range from green (low values) to red (high values). A control panel is overlaid on the left side of the map. It includes a 'Map Data Layer' dropdown set to 'US EPA PM2.5 AQI', a 'Conversion' dropdown set to 'None', and a 'Standard' dropdown set to '10 Minute Average'. A red circle highlights the 'Conversion' dropdown menu, which is open and shows options: 'None', 'US EPA', 'AQandU', and 'LRAPA'. Below the dropdowns is a color scale legend with values from 0 to 300. At the bottom of the control panel, there are checkboxes for 'Outside Sensors' (checked), 'Inside Sensors' (unchecked), 'Show My Sensors' (checked), and 'Averages as Rings' (unchecked). The date and time 'October 14th, 2020, 12:41:56 AM PDT' are displayed. At the bottom of the map, there is a footer with 'Cookies © PurpleAir | © MapTiler © OpenStreetMap contributors'.

Wildfire Smoke is Mostly “Particulate Matter”



Effects of Wildfire Smoke on Kids



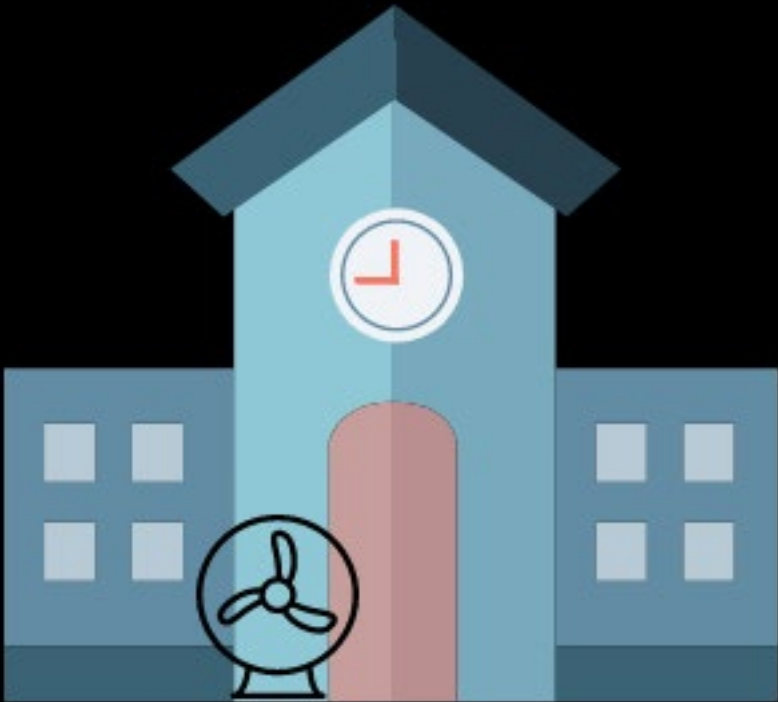
We KNOW wildfire smoke is related to:

- Coughing, sneezing, itchy eyes, sore throat
- Breathing problems (asthma, pneumonia, bronchitis)
- Babies born small
- In adults - more adults die when there is smoke around

Wildfire smoke might also be related to:

- How well kids grow
- How well kids learn
- Lifetime risk of cancer

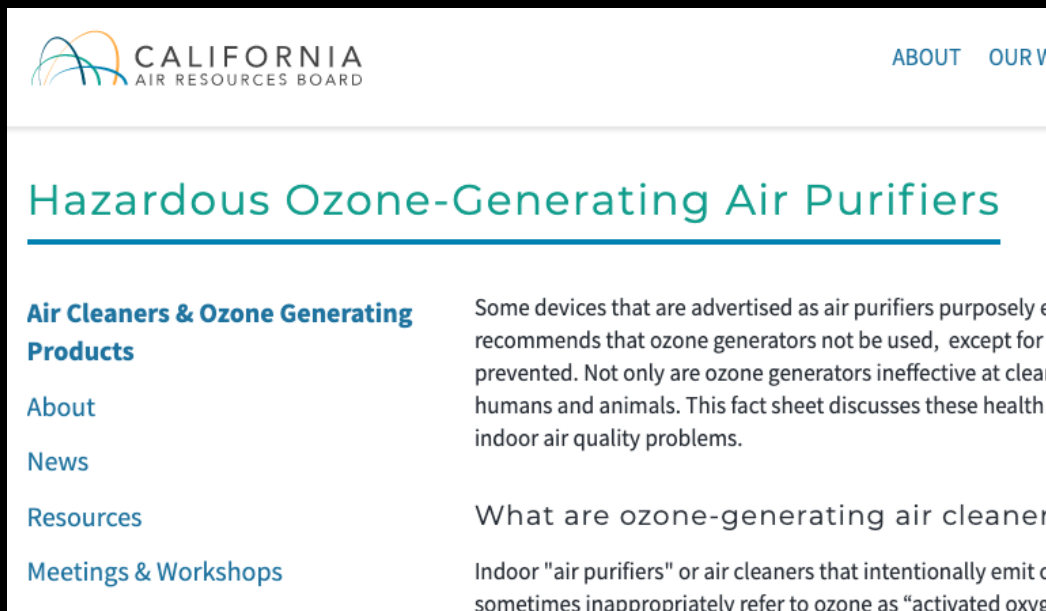
During a Smoke Event: Focus on Indoor Air



HVAC MERV 13 Filter or higher



Portable Air Cleaners - CARB



CALIFORNIA
AIR RESOURCES BOARD

ABOUT OUR WORK

Hazardous Ozone-Generating Air Purifiers

Air Cleaners & Ozone Generating Products

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News

Resources

Meetings & Workshops

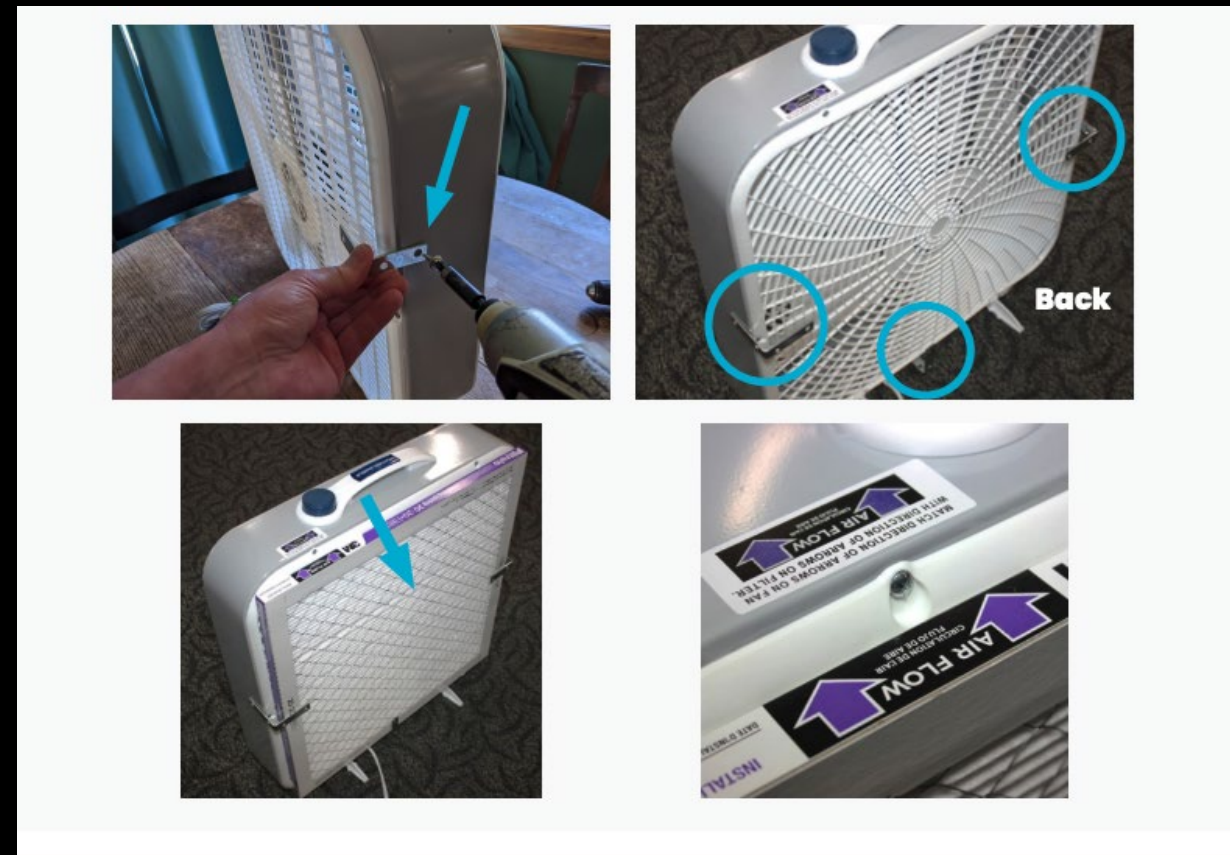
Some devices that are advertised as air purifiers purposely emit ozone. The CARB recommends that ozone generators not be used, except for certain commercial and industrial applications. Not only are ozone generators ineffective at cleaning indoor air, they can be harmful to humans and animals. This fact sheet discusses these health and indoor air quality problems.

What are ozone-generating air cleaners?

Indoor "air purifiers" or air cleaners that intentionally emit ozone are sometimes inappropriately refer to ozone as "activated oxygen."

DIY Air Cleaners?

See Puget Sound Clean Air Agency: pscleanair.gov



How to Reduce Wildfire Smoke Exposure For Kids



▼ ≤ 100%

Go Somewhere
Without Smoke



▼ ~50-80%

Go inside with
(1) HVAC & MERV 13 filter
or
(2) a portable HEPA air cleaner



▼ ~30%

Go Inside and
Shut Windows

For Short Periods of Time:



▼ ~80%

Recirculate the
air in your car



▼ ~80%

Wear a small size
NIOSH N95 Mask *correctly*



▼ ~20%

Wear a medical
mask *correctly*

DO NOT spend unnecessary time outside if the AQI is in the unhealthy ranges.

Cloth face coverings (like those for COVID) DO NOT reliably filter out small smoke particles.



More resources: wspehsu.ucsf.edu

Examples of Low-Cost Sensors for Inside



 PurpleAir



ATMO[®]
TUBE

AQ-SPEC
Air Quality Sensor Performance Evaluation Center
www.aqmd.gov/aq-spec

Cleaner Air Shelters

- Know what air district you are in
- Check local news sources

abc 7 NEWS WATCH VIDEOS San Francisco East Bay South Bay

SHARE
TWEET
EMAIL

AIR QUALITY
Oakland opens 4 clean air centers to protect unhoused from wildfire smoke, poor air quality

By Lauren Martinez
Sunday, September 13, 2020



<https://ww3.arb.ca.gov/capcoa/dismap.htm>

Before a Smoke Event:

Be Smoke Ready

- Make a wildfire plan
- [ready.gov/wildfires](https://www.ready.gov/wildfires)
- Prepare with Pedro for kids

Fight Climate Change

- Decrease your own emissions
- Encourage your leaders to address climate change

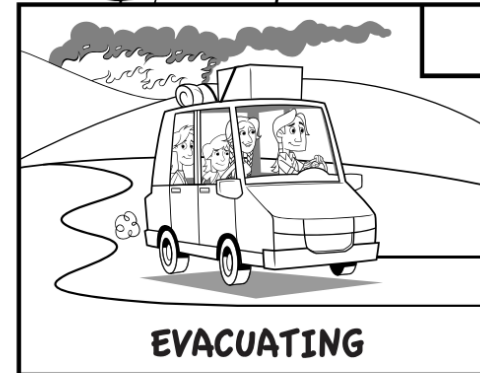
Sometimes wildfires come close to houses. When this happens, you may be asked to leave your home and travel to a safe place.



Remember, this is called ***EVACUATING***.

Elan and Yuma's family needs to evacuate!

Color each picture and number them in the right order to help in their evacuation.



Answer key: (1) PREPARING, (2) WARNING, (3) PACKING, (4) EVACUATING