



# Montana

## CLEAN AIR CENTER RESOURCE GUIDE



DEPARTMENT OF  
PUBLIC HEALTH &  
HUMAN SERVICES

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# Section 1: Background and Purpose

## Introduction

Wildfires are a natural occurrence in Montana that can have major health impacts on residents due to the harmful effects of wildfire smoke. With changes in weather patterns due to climate change and changes in historical wildfire management practices, wildfires and wildfire smoke are now a common event across the West. Wildfire smoke contains a slough of harmful particulate matter (PM) gases, and chemicals. PM is measured in two ways, PM10, or PM that is less than 10 microns in size, and PM 2.5, or PM that is less than 2.5 microns in size. PM 10 and PM2.5 not only trap heat and reduce visibility but can also cause negative short and long-term health impacts when exposed. PM 2.5 is especially harmful to one's health as the particles are so small they can travel into the bloodstream when inhaled, impacting other parts of the body than the respiratory system. Everyone is impacted differently when exposed to smoke and PM, but sensitive populations may see health impacts sooner when exposed to lower concentrations of smoke induced pollution. The Montana Department of Public Health and Human Services (DPHHS) has initiated partnerships with public buildings to create pilot clean air centers in six Western Montana communities, eventually leading to a template for easy replication in other Montana communities. This Clean Air Center Guide will provide resources and protocols to help pilot sites navigate indoor air quality monitoring, public communication, data collection, and general troubleshooting. (See *Appendix A: Clean Air Center Description*)

## Objectives

The Quality Control Plan will establish practices for:

- Selecting potential clean air center sites
- Identifying Clean Air Center Quality Control team members and responsibilities
- Installation procedures for Purple Air monitors
- Identifying troubleshooting protocols when IAQ trending data does not correspond with expected outcomes (troubleshooting)
- Establishing protocols during a wildfire smoke event
- Reporting IAQ information to public
- Triggering IAQ Mitigation Checklist during a wildfire smoke event
- Providing social media templates and public service announcements for Clean Air Center sites
- Encouraging sustainability efforts by soliciting community partners for ongoing clean air center needs

- Communicating steps to evaluate the effectiveness of IAQ improvement strategies to improve IAQ outcomes for future wildfire smoke events

## Section 2: Clean Air Center Planning and Development

### Choosing Clean Air Center Sites in Your Community

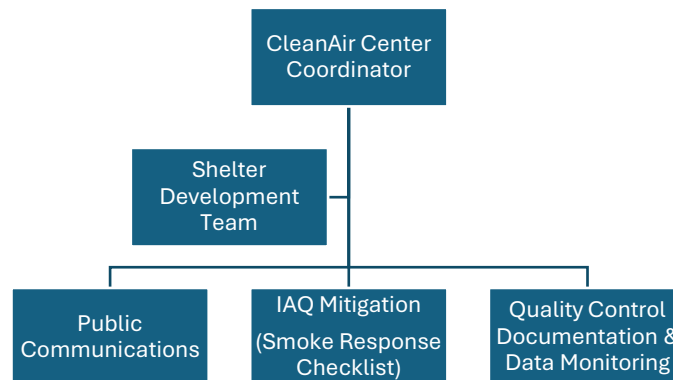
Although a Clean Air Center is available to all community members, it is important to make sure that individuals who are most affected by the health effects of wildfire smoke have the necessary resources when sheltering there. The following criteria should be considered when selecting a site. *(See Appendix B: Clean Air Site Evaluation)*

Criteria	Standard Met	Notes
Meet ADA Accessibility Standards		
Adequate Restrooms		
Adequate Outlets/Ability to Charge Technology		
Storage Area for Supplies		
Adequate Seating		
Ability to Use MERV 13 filter (ideally MERV 16) during smoke event		
HVAC/recirculating air system present		
Capacity: 20 sq ft/person for day shelter		
<b>Outdoor AQI Trigger Number</b>	≥150 for longer than 24 hours	
<b>Indoor AQI Trigger Number</b>	≥100 (Number where air quality becomes unhealthy for sensitive groups)	
<b>ASHRAE STANDARD 55-2017 Indoor Temperature:</b>	67-82 degrees Fahrenheit	

### Clean Air Center Organization Chart

Materials provided to Clean Air Center pilot sites will be organized by required tasks. Mont DPHHS recognizes that one individual at a clean air center may serve multiple roles. However, this organizational chart is designed to develop a comprehensive plan with each responsibility clearly defined. Clean air centers are not required to follow the

organizational chart provided. This only serves as an example as each site addresses their center needs. (See *Appendix B: Clean Air Center Planning Guide*)



## Section 3: DPHHS Communication

DPHHS recognizes that your input and assistance is essential in developing a Clean Indoor Air Center Resource Guide and a Clean Air Recognition Program. Our goal is to provide you the support you need to make your Clean Indoor Air Center a success. Plan for the following activities throughout the wildfire smoke season.

- Meet monthly with DPHHS and other air quality partners over a 9-month period to review actions taken and identify opportunities for improvement
- Share IAQ monitoring data with DPHHS
- Publicize Clean Indoor Air Shelter role in the community  
(A 24-hour shelter is not necessary to be eligible for this opportunity.)
- Keep all Clean Air Shelter in a folder (digital or paper) to be shared with wildfire smoke coordinator at the end of wildfire smoke season.

Please contact the DPHHS Wildfire Smoke Coordinator at any time with questions or concerns, [AirQuality@mt.gov](mailto:AirQuality@mt.gov) | 406-444-5946.

## Section 4: Setting Up Your Site

### Installing Indoor Air Monitors

Before you can develop your Data Monitoring information, your indoor monitors must be installed and registered with PurpleAir. The monitor may be installed by a DPHHS partner. However, determining monitor placement is a decision that will need input from building personnel. Please consider the following when choosing the site:

- Install in area with good air flow, not against the wall or next to a lot of furniture. The monitor should be about 5-6 feet above ground level (or breathing level).
- Install in a place that is visible to the public and where informational materials can also be accessed
- Locate close to a power source
- Look for location with strong Wi-Fi connectivity
- Allow free air flow (at least 180 degrees)
- Place away from pollution sources like HVAC registers or cooking areas.

*For Installation instructions, including registering your monitor on the PurpleAir Website, See Appendix B: Installing Your Indoor Air Monitor*

### Data Monitoring Plan

Each Clean Air Center will follow the data monitoring protocols established by the Department of Public Health and Human Services. Your willingness to follow these protocols allows the DPHHS to identify strengths and limitations of the system. If the protocols are not working at your site, please contact the DPHHS Wildfire Smoke Coordinator to explore data monitoring solutions. This information will not only help your site but will also serve to direct future clean air centers across the state.

### Data Monitoring Protocols

1. Identify person responsible for monitoring outdoor air quality during wildfire smoke season. Identify one-two alternates who would also be familiar with data monitoring procedures if the primary data monitor is not available.
2. Identify outdoor air monitor and indoor air monitor URL's on the Purple Air website. Record these URL's in the Clean Air Center Planning Guide. These URL's will be converted to QR codes and shown on the Indoor Air Monitor Display Information Sheet. This information should be printed and displayed next to the monitor (*See Appendix D: Indoor Air Monitor Display Sheet*).
3. **Outdoor Air Monitoring Procedures:** During a wildfire smoke event, use the Daily Monitoring Checklist (*See Appendix C: Daily Monitoring Checklist*). When outdoor

air quality in the community has remained in the Unhealthy range (AQI $\geq$ 150 ) for 24 hours (3 readings), complete the tasks in the “During a Wildfire Smoke Event Checklist” (See *Appendix C: During a Wildfire Smoke Response Checklist*). Use the Daily Monitoring Checklist each day until the outdoor air quality index levels drop below the unhealthy range AND indoor air quality index drops below the Unhealthy for Sensitive Populations range.

4. **Indoor Air Monitoring Procedures:** During a wildfire smoke event, use the Daily Monitoring Checklist (See *Appendix C: Daily Monitoring Checklist*). If the indoor air quality numbers reach the Unhealthy for Sensitive Populations Range (AQI  $\geq$ 100 ), complete the tasks in the “During a Wildfire Smoke Event Checklist” (See *Appendix C: During a Wildfire Smoke Event Checklist*). **The Indoor Air Mitigation Response will begin immediately. Do not wait 24 hours to begin mitigation efforts.** Use the Daily Monitoring Checklist each day until the outdoor AQI levels drop below the Unhealthy range AND indoor AQI drops below the Unhealthy for Sensitive Populations range.

**Please Note:** Either outdoor OR indoor AQI concerns can trigger the use of the Wildfire Smoke Response Checklist and Daily Monitoring Activities.

## Troubleshooting Air Quality Monitors

Each PurpleAir Monitor is equipped with two sensors to ensure accuracy. However, it is important to know what to do if your monitor isn't working correctly. The following signs indicate that it's time to troubleshoot an air quality monitor:

- **Your device is reporting inaccurate data.** This is an indication that the laser counters aren't working. First, clean the device. Unplug the monitor and place it at the bottom of a vacuum (on low setting) for 2-3 minutes. However, DO NOT clean regularly because this will shorten the life of the monitor.
- **The device won't turn on even when you change power sources.** Go to monitor website for troubleshooting information.
- **Wi-Fi connection is lost.** If your device is disconnected from WiFi for longer than 10 minutes, it will display its network named PurpleAir\*\*\*. Simply connect to this network and reconnect the sensor to your Wi-Fi. If this doesn't work, go to monitor website for further troubleshooting.

### Tips to prolong the life of your monitor:

- Install your air quality monitor according to expert recommendations. If you install it next to an area with higher pollution levels daily (ie: HVAC register, cooking areas), it won't last as long.



## Section 5: Publicity and Social Media

It is important to let the community and emergency responders know that your center is available to the public. We have included a media statement and Instagram posts to help you in your efforts (see *Appendix D*). The Instagram graphics are saved as PowerPoint images to allow you to download and edit them as you wish, while posts for X and Instagram are found in the resource guide.

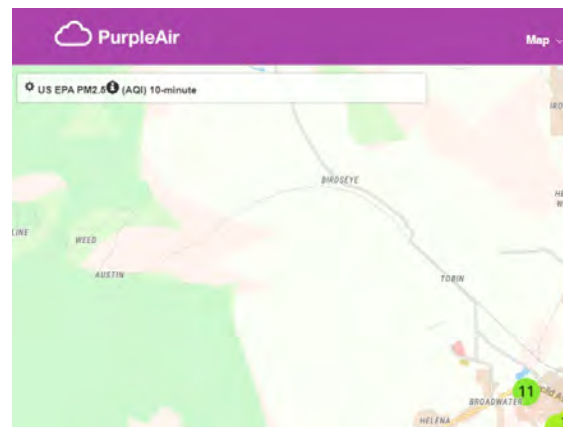
We have also included a template to request help from the community (*Appendix D: Volunteer Letter Template*). This volunteer and donation announcement can be shared with churches, service organizations, and businesses to obtain assistance in keeping the center available to the community.

Finally, there are educational documents for the community regarding how they can protect the air in their homes and instructions for making a Do-It-Yourself Air Clean. These templates are designed to be available to the public and ideally, displayed near the indoor air monitor information sheet (See *Appendix D*).

## Section 6: Before Wildfire Smoke Season

Please take the following steps prior to May 1 so that your shelter is ready when a wildfire smoke event occurs:

1. Familiarize yourself with your indoor air monitor. Make sure your map settings are displaying the US EPA 2.5 AQI numbers.



2. Inventory Clean Air Center supplies from DPHHS. (See *Appendix A: Inventory of Materials from DPHHS*)
3. Complete the tasks in the-Before a Wildfire Smoke Event (See *Appendix C: Before a Wildfire Smoke Response Checklist*)



4. **Important Note:** *The Wildfire Smoke Response Checklist is designed to serve as a Gold Standard for indoor air quality control. DPHHS recognizes that clean air centers may not accomplish all items on the checklist. If that is the case, please put a comment in the “notes” section. This will help us determine requirements for future clean air sites and develop the Clean Indoor Air Recognition Program.*

## Section 7: During a Wildfire Smoke Event

Outdoor and indoor air quality monitoring should occur twice daily during a wildfire smoke event (See Appendix C: Daily Monitoring Checklist). Data monitoring procedures are restated below:

1. **Outdoor Air Monitoring Procedures:** During a wildfire smoke event, use the Daily Monitoring Checklist (See Appendix C: Daily Monitoring Checklist). When Outdoor Air Quality in the community has remained in the Unhealthy range (AQI  $\geq 150$ ) for twenty-four hours (3 readings), complete the tasks in the “During a Wildfire Smoke Event” section of the Wildfire Smoke Response Checklist (See Appendix C: *During a Wildfire Smoke Response Checklist*). Use the Daily Monitoring Checklist each day until the Outdoor AQI levels drop below the unhealthy range AND indoor AQI drops below the Unhealthy for Sensitive Populations range.
2. **Indoor Air Monitoring Procedures:** During a wildfire smoke event, use the Daily Monitoring Checklist (See Appendix C: Daily Monitoring Checklist). If the Indoor Air Quality numbers reach the Unhealthy for Sensitive Populations Range (AQI  $\geq 100$ ), complete the tasks in the “During a Wildfire Smoke Event” section of the Wildfire Smoke Response Checklist (See Appendix C: *During a Wildfire Smoke Response Checklist*). **The Indoor Air Mitigation Response will begin immediately. Do not wait twenty-four hours to begin mitigation efforts.** Use the Daily Monitoring Checklist each day until the outdoor AQI levels drop below the Unhealthy range AND indoor AQI drops below the Unhealthy for Sensitive Populations range.

**Please Note:** *Either outdoor OR indoor AQI concerns can trigger the use of the Wildfire Smoke Response Checklist and Daily Monitoring Activities.*



## Section 8: After a Wildfire Smoke Event

After a wildfire smoke event has occurred, it is important to continue clean air mitigation protocols until the IAQ  $\geq$ 100. Once IAQ is consistently below 100, complete the tasks in the “After a Wildfire Smoke Event Checklist” section of the Wildfire Smoke Response Checklist (*Appendix C: After a Wildfire Smoke Event*).

## Section 9: Clean Air Center Review and Sustainability Plan

Please send a copy of all documentation in digital or print form to DPHHS by October 15 of the wildfire smoke season. DPHHS will use this information to guide future Clean Air Center efforts. In addition, please complete the one-page Center Evaluation and Sustainability Plan (*See Appendix B: Center Evaluation and Sustainability Plan*). This document is designed to highlight successes and challenges over the past wildfire smoke season and drive plans for making the Clean Air Center sustainable in future wildfire smoke seasons.

# APPENDICES

## Appendix A: Clean Air Center Overview

- Clean Air Center Description
- Memorandum of Understanding with DPHHS
- Inventory of Materials from DPHHS

## Appendix B: Quality Control Documents

*This documentation is necessary for receiving DPHHS assistance in clean air center establishment:*

- Clean Air Center Site Evaluation
- Clean Air Center Planning Guide
- Installation of Indoor Air Monitor Instructions
- Clean Air Center Evaluation and Sustainability Plan

## Appendix C: Indoor Air Quality Mitigation Checklists and Materials

The following checklist and documents will be used during a wildfire smoke event to help ensure Clean indoor air quality.

- Wildfire Smoke Response Checklists
  - Before Wildfire Season
  - During a Smoke Event
  - After a Smoke Event
- Daily Monitoring Checklist
- Template for Clean Air Center sign (Centers may develop their own sign but must have one available)
- Signs for Doors and Windows (Centers may develop their own signs but must use them)

## Appendix D: Tailored Communications Messaging

These documents are optional templates to help you communicate information about your Clean Air Center. Please feel free to substitute your own publications if you prefer to develop them yourselves.

- Social Media Templates
- Media Statement Template
- Volunteer Letter Template
- Indoor Air Monitor Display Information Sheet
- Protecting Yourself Indoors Information Sheet
- DIY Air Clean Instructions

# Clean Indoor Air Recognition Program



## Protecting Community Members from Wildfire Smoke with Local Clean Air Centers

**The Research:** Montana summers are becoming hotter and drier, increasing the risk for wildfires. As fires grow in number, severity, and size, the amount of wildfire smoke also increases, with effects often lasting longer than the fire itself. In addition, Montana is also affected by wildfire smoke from neighboring states and Canada. Researchers predict that for Montanans, this means that wildfire smoke season will continue to grow, both in duration and intensity.

Although everyone can be affected by wildfire smoke, some individuals have increased risk for adverse health impacts due to smoke exposure. This includes individuals who suffer from chronic heart and lung conditions, women who are pregnant, children, older adults, and lower-income families.

During a smoke event, it is recommended that we stay indoors. However, we know that as outdoor air quality worsens, indoor air quality also becomes worse. In fact, most buildings show less than a 50% reduction of smoke indoors vs. outdoors. There are several strategies to protect and improve indoor air quality, but often times, those most at risk have the least resources to change their indoor environment.

**Our Objective:** Empower six public buildings across Ravalli County and Missoula County to serve as Clean Air Center for citizens during wildfire smoke events.

### Provided by DPHHS:

- Smoke readiness planning guidance and resources
- HEPA air cleaner(s)
- Indoor air quality monitor
- \$1,500 stipend for incurred expenses
- HVAC system training for building manager/HVAC contractors

### Partner Commitment:

- Adopt policies and protocols for protecting the building from wildfire smoke and improving indoor air quality conditions during smoke events
- Develop/adopt a building smoke readiness plan
- Meet monthly with DPHHS and other air quality partners over a 9-month period to review actions taken and identify opportunities for improvement
- Share IAQ monitoring data with DPHHS
- Publicize Clean Indoor Air Center role in the community  
(A 24-hour center is not necessary to be eligible for this opportunity.)

### Primary Contact:

Mary Anderson, Wildfire Smoke Coordinator  
Public Health and Safety Division | Montana DPHHS  
AirQuality@mt.gov | 406-444-5946

### Program Website

[dphhs.mt.gov/airquality/IndoorAirQuality/SmokefromFires](https://dphhs.mt.gov/airquality/IndoorAirQuality/SmokefromFires)

# Memorandum of Understanding

**Project Title:** Establishment and Operation of a Clean Air Center

**Primary Site PI:** [Name of Principal Investigator]

**Primary Site Institution:** [Department of Health]

**Project Start Date:** February 1, 2025

**Project End Date:** September 1, 2025

## 1. Project Description

The purpose of this project is to establish and operate a Clean Air Center to provide safe indoor air quality during wildfire smoke events. The Clean Air Center will serve as a refuge for vulnerable populations, including individuals with respiratory conditions, the elderly, and children.

## 2. Objectives

- To provide a clean air environment for the community during wildfire smoke events.
- To monitor and maintain indoor air quality within the Clean Air Center.
- To educate the public on the importance of indoor air quality and how to protect themselves during smoke events.

## 3. DPHHS Commitment:

- Smoke readiness planning guidance and resources
- HEPA air cleaner(s)
- Indoor air quality monitor
- \$1,500 stipend for incurred expenses
- HVAC system training for building manager/HVAC contractors
- Assistance finding community partners to assist with clean air shelter needs (ie: water, snacks, quiet activities for children, etc.)

## 4. Partner Commitment

- Adopt and implement policies and protocols for protecting the building from wildfire smoke and improving indoor air quality conditions during smoke events
- Maintain air quality monitors and portable air cleaners to ensure normal operation
- Develop/adopt a building smoke readiness plan
- Meet monthly with DPHHS and other air quality partners over a 9-month period to review actions taken and identify opportunities for improvement
- Share IAQ monitoring data with DPHHS
- Publicize Clean Indoor Air Shelter role in the community  
(A 24-hour shelter is not necessary to be eligible for this opportunity.)

## 5. Timeline

- **Milestone 1: Technical training:** May 6, 2025 and **Site Visit:** April 7-9, 2025
- **Milestone 2: Completion of Clean Air Center Setup** – June 1, 2025



- **Milestone 3: Implementation of air quality protocols** – June 15, 2025 or first wildfire smoke event (this may be later if no wildfire smoke events occur on June 15.)

## **6. Signatures**

### **Department of Public Health and Human Services Representative:**

Name: Mary Anderson

Title: Wildfire Smoke Coordinator

Signature:

Date:

### **Clean Air Center Representative:**

Name:

Title:

Signature:

Date:

# Clean Air Center Inventory

Item	Considerations	Notes
Clean Air Center Resource Guide		
Purple Indoor Air Monitor		
HEPA Air Cleaner		
Replacement Filter Set		
Clean Air Center Sign		
Financial Incentive (\$1500)		
Site Specific Documents		

*Resource Guide and Site Specific Documents Available on Thumbdrive and Zip Drive*



# Clean Air Center Site Evaluation

Criteria	Standard Met	Notes
Meet ADA Accessibility Standards		
Adequate Restrooms		
Adequate Outlets/Ability to Charge Technology		
Storage Area for Supplies		
Adequate Seating		
Ability to Use MERV 13 filter during smoke event		
HVAC/recirculating air system present		
Capacity: 20 sq ft/person for day shelter		
<b>Outdoor AQI Trigger Number</b>	≥150 for longer than 24 hours	
<b>Indoor AQI Trigger Number</b>	≥100 (Number where air quality becomes unhealthy for sensitive groups)	
<b>ASHRAE STANDARD 55-2017 Indoor Temperature:</b>	67-82 degrees Fahrenheit	

# Clean Air Center Planning Guide

This document is designed to assist potential clean air centers navigate the operation of a clean air center during a wildfire smoke event. Clean air center participants will complete required to complete this document and give a copy to the MT DPHHS Wildfire Smoke Coordinator.

## Defining Roles and Responsibilities:

Materials provided to clean indoor centers will be organized by required tasks. Montana DPHHS recognizes that one individual at a clean air center may serve multiple roles.

Project Personnel	Role	Project Roles and Responsibilities
<input type="text"/>	Clean Air Center Coordinator	Communicate with MT DPHHS and other site partners; Schedule site visits and communicate training information; monitor budget; initiate assistance from MT DPHHS or technical trainer when needed
<input type="text"/>	Center Development Team	Individuals responsible for developing site protocols triggering clean air center availability; troubleshoot unforeseen issues that arise with shelter development; review documentation from quality control monitoring
<input type="text"/>	Public Communications	Communicate clean air center availability through social media messaging and community partners; communicate IAQ readings to public; provide educational materials re: wildfire smoke indoor response to public; solicit community donations to support clean air center needs
<input type="text"/>	Indoor Air Quality Mitigation	Complete the Wildfire Smoke Response Checklist, monitor IAQ during a smoke event; document readings two times/day when shelter is in use and record date/time that Wildfire Smoke Response Checklist was initiated. Submit Information to DPHHS for data keeping
<input type="text"/>	Quality Control Personnel	Installation, Maintenance and Troubleshooting Indoor Air Monitor

Who will complete the Daily Monitoring Checklist if Indoor Air Quality Mitigation Designee is not available?

What URL's will you use to monitor the community's Outdoor Air Quality and the Indoor Air Quality in your facility?

How will you communicate this information to the public?

What Outdoor Air Quality number would trigger Clean Air Center Operation?

What are the Clean Air Center Hours?

What resources do you need that have not been provided?

# Installing Your Purple Indoor Air Monitor

These instructions are also available online: [How to Install Your PurpleAir Air Quality Monitor](#) for your convenience.

## Location:

- Install out in the open (not behind furniture) and five to six feet above ground level
- Install in a place that is visible to the public and where informational materials can also be accessed
- Locate close to a power source
- Look for location with strong Wi-Fi connectivity
- Allow free air flow (at least 180 degrees)
- Place away from pollution sources like HVAC registers or cooking areas.

## Mount Monitor:

Monitor must be level and stable to avoid data disturbances. Then, securely attach monitor to a stable structure (a pole or wall). It may also sit on a stable surface if it is not disturbed.

## Connect to Power:

Plug device into power source. When plugged in, a blue light will appear as it boots up.

## Connect to Wi-Fi:

- 1) Connect Air Quality Monitor's hotspot to personal device (phone or computer). Open network settings on your personal device and connect to air monitor hotspot. The hotspot's name on the network will be PurpleAir-\*\*\*\* (asterisks represent 2-4 character code indicating air quality monitor's device ID. It may take 10 minutes for the network to appear after the monitor receives power.
- 2) If a pop up does not appear, open a web browser and enter <http://192.168.4.1/config> into the address bar. If a pop up still does not appear, pause or disable mobile data on your personal device and re-enter the URL address.
- 3) After connecting to the hotspot, select the network you are connecting your monitor to from the list. After you enter your Wi-Fi password, the monitor will begin to connect. This may take a couple of minutes. Once the Wi-Fi connection is established, the message "Looking Good" will appear at the top of the page.

- 4) Once the Wi-Fi connection is established, you can disconnect your device from the hotspot. The PurpleAir\*\*\*\* will no longer appear if you have successfully connected the monitor to the network.
- 5) If you have trouble connecting to the network, visit Purple Air's troubleshooting site: [Sensor WiFi and Registration - Sensors - PurpleAir Community](#)

## Register Your Device:

Register your device to appear on the Purple Air Map by going to [www.purpleair.com/register](http://www.purpleair.com/register) and following the site instructions. If you assign a map location to your device, it will appear on the Purple Air map within minutes.

- Indoor Purple Air Registration Information:
- Device Id: Printed on device label just above bar code, include colons
- Associated Email: [airquality@mt.gov](mailto:airquality@mt.gov)
- Location Name: Name of your facility (ie: Bitterroot Library Inside)
- Visibility: Public. This will place it on the Purple Air Map so community can follow IAQ
- Map Location: Verify suggested latitude and longitude
- Owner's Name: Your Facility
- Owner's Email: Person at your facility responsible for maintaining monitor

## Verify Air Quality Information:

Ensure your air quality monitor is transmitting data correctly by checking the Purple Air Quality Map or the Purple Air Mobile App.

# Clean Air Center Evaluation and Sustainability Plan

*Although we recognize that the primary goal of a Cleaner Air Center site is to provide a necessary service to their community, DPHHS is also using your experience to guide future cleaner air center sites. Your input is invaluable in our efforts to make a realistic, impactful, and sustainable model for cleaner air sites across Montana. Thank you for completing the information on this page.*

1) Name of Person(s) who completed the Wildfire Smoke Readiness Checklist:

Were there items on the checklist that you were not able to complete? Please list those items:

2) Name of Person(s) responsible for completing the Daily Monitoring Checklist:

3) Was the Daily Monitoring Checklist easy to follow? Why or why not?

4) How often did you use the public service announcement and social media templates in the resource guide? How would you suggest improving those documents?

5) Do you plan to continue serving your community as a cleaner indoor air center in the future? If yes, who have you identified (government offices, churches, businesses, non-government organizations) as potential partners to help sustain the Cleaner Air Center in the future?

6) Please include any additional comments/concerns that will help us work with future Cleaner Air Center sites.

# Before Wildfire Smoke Season Checklist

Task	Date Completed:	Notes
<b>1) Have a smoke readiness plan</b>		
HEPA Air Cleaner available and operable		
Extra filters available for HEPA and furnace		
Install Indoor Sensor and Monitor IAQ		
Monitor Airnow.gov		
Determine Indoor Air Room or Building Capacity		20 square feet/person
Keep floors and furniture clean (minimum carpet/rug, soft upholstery)		
Check and repair all weather-stripping, window and door seals		
Keep vestibule doors closed		
<b>2) Check and repair HVAC system as needed</b>		<b>Much of this will be completed during the site visit</b>
Perform scheduled maintenance on HVAC system		
Evaluate ability of the HVAC System to handle higher efficiency filter (MERV 13 or higher)		
Check outside air damper seals		
Verify operation of outside damper actuators and linkages		
Create ability to check filter conditions		
Make sure existing system can maintain good IAQ		
Make sure positive indoor pressure		





## Before Wildfire Smoke Season Checklist continued

Be familiar with control sequences and operations		
Test HVAC normal operations		
Check O & M manual for existence and comprehension		
Designate clean air room (space) if unable to condition the entire site		Capacity: 20 square feet/person
<b>3) Outreach and Publicity</b>		
Solicit community partners to help support shelter needs		
Publicize center availability including hours of operation		
Print indoor air monitor information sheet and display next to monitor		



# During Smoke Event Checklist

Task	Date Completed:	Notes
Check HVAC and HEPA filters and replace if necessary		
Display Clean Air Center Sign		
Place Signs Around Doors and Windows (Keep Closed)		
Monitor IAQ With Indoor Sensor		
Monitor Indoor Temperature through Sensor (Above 80 is Unhealthy)		
Reduce sources of indoor pollution: vacuuming, cooking, candles, cleaning products		
<b>Make modifications for temporary HVAC operations</b>		
Decrease outdoor air intake to minimum or off		
Increase recirculating air to maximum		
Test HVAC system in temporary mode. Adjust to smaller clean air space if necessary		
Maintain positive building pressure		



# After Smoke Event Checklist

Task	Date Completed:	Notes
Wet mop/dust with wet cloth to avoid pollution going back into the air		
Monitor IAQ and continue to use HEPA air cleaner if necessary		
Change filters in Air Cleaner and HVAC system (if necessary)		
If OAQ is healthy, open windows to circulate clean air		
If OAQ is healthy, set outdoor air in HVAC unit to maximum and return air to minimum		
Thank local partners and community for assistance		
Please record any lessons learned during the smoke event.		



# Daily Monitoring Checklist

DAILY MONITORING CHECKLIST DURING SMOKE EVENT MORNING			
Date: <input style="width: 80%;" type="text"/>	Time: <input style="width: 80%;" type="text"/>	Outdoor Air Quality: <input style="width: 80%;" type="text"/>	Indoor Air Quality: <input style="width: 80%;" type="text"/>
<b>If indoor air is at unhealthy levels:</b>			
Action	Completed by: (Initials)	Time:	Notes:
Exterior Doors Closed	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>
Windows Closed	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>
Air Cleaner Activated	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>
<b>Data Monitoring Follow Up:</b> <i>Wait at Least One Hour before second data recording</i>			
	Time: <input style="width: 80%;" type="text"/>	Outdoor Air Quality: <input style="width: 80%;" type="text"/>	Indoor Air Quality: <input style="width: 80%;" type="text"/>
<b>Notes or Follow-up:</b>			

DAILY MONITORING CHECKLIST DURING SMOKE EVENT AFTERNOON			
Date: <input style="width: 80%;" type="text"/>	Time: <input style="width: 80%;" type="text"/>	Outdoor Air Quality: <input style="width: 80%;" type="text"/>	Indoor Air Quality: <input style="width: 80%;" type="text"/>
<b>If indoor air is at unhealthy levels:</b>			
Action	Completed by: (Initials)	Time:	Notes:
Exterior Doors Closed	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>
Windows Closed	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>
Air Cleaner Activated	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>	<input style="width: 80%;" type="text"/>
<b>Data Monitoring Follow Up:</b> <i>Wait at Least One Hour before second data recording</i>			
	Time: <input style="width: 80%;" type="text"/>	Outdoor Air Quality: <input style="width: 80%;" type="text"/>	Indoor Air Quality: <input style="width: 80%;" type="text"/>
<b>Notes or Follow-up:</b>			

# Clean Indoor Air Center



**Capacity:**

**Hours:**

**Entity Logo Here**

**We proudly serve  
our community as a  
Clean Air Center**

Please help us maintain healthy  
indoor air quality  
by keeping windows and doors closed.

# Social Media Posts for Clean Air Centers:

## Instagram and Facebook:

### **Breathe Easy, Stay Safe!**

As wildfire smoke continues to affect our community, we're here to help. Visit the **Clean Air Center** at [Your Location Name] to ensure you and your loved ones can enjoy fresh, healthy air.

**Location:** [Insert Address] **Hours:** [Insert Hours of Operation]

Comfortable and safe environment \* Open to everyone \* Wi-Fi Available  
Together, we can weather the wildfire season.

### **Protect Our Kids from Wildfire Smoke!**

Wildfire smoke can seriously impact children's health, as their developing lungs are more vulnerable to harmful particles. Ensure they stay in environments with clean, filtered air to keep them safe.

Visit the **Clean Air Center** at [Your Location Name]

**Location:** [Insert Address] **Hours:** [Insert Hours of Operation]

Together, we can weather the wildfire season.

## X:

Breathe easy at our Clean Air Center! Visit [Location Name] for a safe, smoke-free environment during wildfire season. Open to everyone.

**[Address]**

**[Hours]**

Together, we can weather the wildfire season.

Wildfire smoke can seriously impact children's health.  
Ensure they stay in environments with clean, filtered air.  
Visit the **Clean Air Center** at [Your Location Name]  
**Hours:** [Insert Hours of Operation]



DEPARTMENT OF  
**PUBLIC HEALTH &  
HUMAN SERVICES**



# Clean Air Center Media Statement

## FOR IMMEDIATE RELEASE

### **[Your Organization/Facility Name] Announces Clean Air Shelter During Wildfire Smoke Event**

**[City, State] – [Date]** – As wildfire smoke continues to blanket [Community Name], [Your Organization/Facility Name] is stepping up to support our community by offering a Clean Air Center to ensure safe indoor air quality for all residents.

In light of the current wildfire smoke event, health officials recommend staying indoors and keeping windows and doors closed. However, emerging research reveals that the smallest and most harmful particles from wildfire smoke can penetrate even well-sealed buildings, posing a serious risk to indoor air quality. These particles can enter the lungs, bloodstream, and affect overall health, particularly for vulnerable groups such as children, seniors, pregnant women, and those with preexisting health conditions. You may be able to maintain healthy indoor air quality in your home by using a HEPA air purifier, replacing your furnace filter with a MERV 13 or higher filter, and by changing your air conditioning settings to “recirculate”. If these options are not available to you, it will be very difficult for you to keep your indoor air quality healthy during a smoke event.

To address this critical need, [Your Organization/Facility Name] will serve as a designated Clean Air Center. This facility is equipped with high-efficiency air purifiers and other features to minimize smoke exposure and provide a safer environment during the wildfire event.

#### **Key Details:**

- **Location:** [Facility Address]
- **Hours of Operation:** [Opening and Closing Times]
- **Features:**
  - Advanced air purification systems
  - Smoke-free environment
  - Comfortable seating areas
  - Access to informational resources on smoke safety

We invite all community members to take advantage of this resource and help us spread the word. By working together, we can ensure a healthier environment for everyone during this challenging time.

For additional information or media inquiries, please contact:

[Your Name], [Your Title]

[Your Organization/Facility Name]

[Phone Number]

[Email Address]

[Website URL]



Dear Neighbors and Community Members,

As wildfire smoke continues to impact [name of community], health officials advise us to stay inside, keep doors and windows closed, and limit outdoor activities. However, recent research indicates that these measures alone may not fully protect us. The most harmful particles in wildfire smoke are incredibly small, capable of penetrating closed doors and windows, and making indoor air unsafe.

These tiny particles can travel deep into the lungs, entering the blood stream and affecting the entire body. This exposure particularly dangerous for vulnerable groups, including children, older adults, pregnant women, and individuals with heart or respiratory conditions. Many of these individuals may lack the resources to ensure clean indoor air quality, putting them at greater risk for severe health complications.

We are pleased to announce that during smoke events, the [name of facility] will now serve as a Clean Air Shelter during smoke events. What is a Clean Air Shelter? A clean air shelter is a designated space equipped to significantly reduce smoke particles, offering a safer environment during wildfire events.

**Key Details:**

**Location:** [Specify the shelter's address]

**Hours of Operation:** [Include opening and closing times]

**Features:**

- High-efficiency air purifiers
- Smoke-free environment
- Comfortable seating
- Information resources

**How You Can Help:**

1. **Volunteer:** We need volunteers to assist with shelter operations. If you can help, contact us at [Email/Phone]
2. **Donations:** Financial contributions are crucial for maintaining the shelter. Visit [Website/Donation Link] to contribute.

Let's unite as a community to support one another during this challenging time. Spread the word, lend a hand, and help keep everyone safe!

Sincerely,

[Your Name]

[Organization/Community Group]

[Type here]

# Indoor and Outdoor Air Quality

**Site Name**

**Current Outdoor Air**






QR Code Here

**Current Indoor Air:**

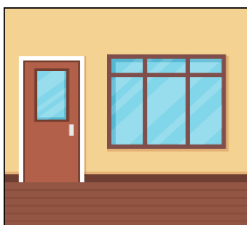
QR Code Here

Wildfire smoke, vehicle exhaust, woodfire emissions, and contain tiny toxic particles (known as PM 2.5). These particles are one fourth the size of a dust particle and can easily enter the lungs. In lower concentrations, the lungs can filter them from the body but higher concentrations are dangerous to your health.

**Air Quality Activity Guidelines (AQI) reports the level of air quality and health concerns for each category.**

Air Quality Index		What should I do?
0-50		Good! It's a great day to be outside!
51-100		Moderate: Some risk for those who are sensitive to air pollution
101-150		Unhealthy for Sensitive Groups: Sensitive groups should limit time outside and avoid strenuous outdoor activity
151-200		Unhealthy for Everyone: Everyone should reduce exposure. Limit time outside and take steps for clean indoor air.
201-500		Hazardous: Stay inside and filter indoor air. Go elsewhere for cleaner air if needed.

## Steps to take in your home:



Keep doors and windows closed



Avoid stovetop cooking, candle burning, and smoking indoors



Use a HEPA Air Cleaner or a DIY Box Fan Filter

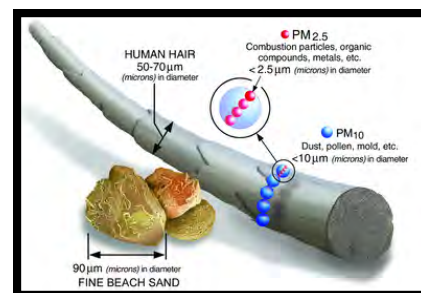
# Wildfire Smoke & Your Health

## Protecting Yourself Indoors

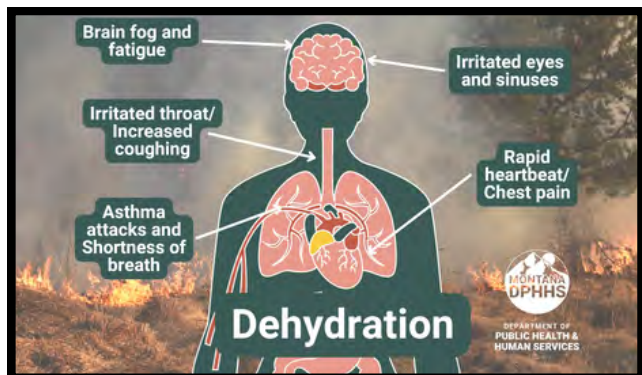


### Why do we worry about indoor air and wildfire smoke?

Wildfire smoke contains particulate matter that is four times smaller and up to ten times more toxic than other pollution. These tiny particles enter our homes and commercial buildings through open doors and windows, HVAC systems, and poorly sealed homes. They then travel into our lungs and in high quantities, can enter the bloodstream. This is harmful to all of us, but can be dangerous (and in some cases, deadly) to those with lung or heart conditions or those who are pregnant, children, or senior citizens.



### Symptoms of Smoke Exposure



Wildfire smoke exposure may increase the risk of respiratory infections like bronchitis and pneumonia. Persons with lung or heart conditions should keep their rescue medication stocked and available. Closely monitor those who are more vulnerable and seek medical attention if symptoms become more noticeable.

### Protecting Your Indoor Air

During a smoke event, the air inside can become as unhealthy as the air outside. These strategies protect the air in your home, community buildings, and businesses.



Keep doors and windows closed. Open at night to cool home if necessary



Avoid stovetop cooking, candle burning and smoking indoors



Use a HEPA air purifier or a DIY filter



Seal cracks in doors and windows



Change A/C setting to recirculate

For more information visit [airquality.mt.gov](http://airquality.mt.gov)

# DIY Air Cleaner Instructions



Smoke from wildfires in Montana can affect indoor as well as outdoor air quality, putting people's health at risk from exposure to particulate matter and other pollutants. When outdoor air is unhealthy, a HEPA air cleaner is recommended for your home. If a HEPA air cleaner is not available, a DIY Air Cleaner is an inexpensive and effective alternative to achieving cleaner indoor air.

The Basic Design for a DIY Air Cleaner is inexpensive, easy to build, and effective in small and medium sized rooms. The second image is a more complex design that will improve the effectiveness of the DIY cleaner.

How to Video from the Washington Department of Ecology for a Basic Box Fan DIY Cleaner: <https://youtu.be/4qr1Aj6Di7w?si=4gPDUKMCg7rI9Pxx>

### DIY Air Cleaner to Reduce Wildfire Smoke Indoors: Basic Design

#### Materials

20" X 20" X 1" or 4" air filter  
Suggested rating: MERV 13

20" X 20" box fan  
Only use certified fans with UL or ETL marking (2012 model or newer)

Clamps or Duct Tape or Bungee Cords

#### Assembly

1. Attach the air filter to the back of the box fan using either clamps, duct tape or bungee cords.
2. Check the filter for the direction of the air flow (marked on the side of the filter).
3. Replace filters when dirty.

Learn about box fan safety tips: <https://www.epa.gov/air-research/research-diy-air-cleaners-reduce-wildfire-smoke-indoors#FAQ>

Two filters taped with cardboard to form a triangle against the fan (video from the Confederated Tribes of the Colville Reservation): <https://youtu.be/ukyF2xm8cws?si=MDCv25sGtbr4V0MX>

### DIY Air Cleaner Designs: Beyond the Basic

#### Good

**Basic Supplies:**

- 20" x 20" box fan
- 20" x 20" x 1" or 4" MERV 13 air filter
- 20" x 20" cardboard shroud (cutout the size of the fan blades)
- Clamps, duct tape, or bungee cords

#### Better

**Additional Supplies:**

- Two - MERV 13 air filters
- Triangle cardboard cutout for base on top

#### Best

**Additional Supplies:**

- Four or five - MERV 13 air filters
- If using five filter design, use leg supports (e.g., blocks) to allow airflow through bottom

#### Ways to Improve Effectiveness:

- Add a cardboard shroud (no-cost improvement)
- Use thicker filters (4" rather than 1" MERV 13 filters)
- Use multiple filters (2-5 filter designs)

#### Key Reminders:

- Only use certified fans with UL or ETL marking (2012 model or newer)
- Keep extra filters on hand
- Replace filters when dirty

