

HEPA Filter Community Programs: A Whole Community Approach

Smoke Matters

Smoke from wildfire or prescribed fire of any concentration can pose a direct threat to human health and wellbeing. A PM2.5 molecule is 30 times smaller than a piece of human hair and can embed deep into the lungs causing health issues. When the air quality becomes unhealthy, public health specialists recommend people spend more time indoors away from the smoke.

However, indoor air quality must also be protected. Smoke can seep into structures from cracks in windows, from around improperly sealed door and window frames, and when opening and closing doors. Portable HEPA (High Efficiency Particulate Air) filters provide one option to remove smoke and particulate matter from the air. Residential structures with central HVAC systems can also install filters with a MERV rating of 13 or higher. Other solutions include sealing doors and windows where smoke tends to intrude.

Why Create a HEPA Filter Program?

Public and nonprofit organizations can play an essential role in assisting residents with creating clean indoor air during wildfire and prescribed fire events. Organizations with the capacity to purchase, store and distribute HEPA filters have more buying power, can get reduced prices and harness volunteer time to get programs started to provide HEPA filters to the community. These programs are commonly referred to as "Residential HEPA Filter Programs."

Partnerships are essential when providing this service to your community. Potential partners include public health organizations, Chambers of Commerce, local governments, organizations working with aging populations and organizations assisting unhoused residents. A real-time example of an effective partnership is **Smokewise Ashland** in Ashland, Oregon.

Prior to beginning a Residential HEPA Filter Program, a local community will need to make several decisions about what type of program they plan to offer. Some communities have chosen to loan filters, requiring tracking systems, storage space, and cleaning methods while other communities have operated programs which provide filters at low- or no-cost to residents. The available funding, storage space and personnel capacity all should factor into the decision about whether to loan or provide filters to the community.

Key Ingredients for Residential HEPA Filter Programs

- 1. Essential partnerships
- 2. Grant funding
- 3. Storage space (if lending filters)
- 4. Personnel capacity



Tips for Starting an Individual or Residential Community HEPA Filter Program

- 1. Identify the most at-risk populations in your community. This can be achieved by partnering with community organizations assisting older populations, low income residents and unhoused residents.
- 2. Seek funding for purchasing HEPA filters. Funding opportunities tend to be the biggest hurdle. Seek funding from local foundations and organizations first. Additional funding sources are becoming more available. The Federal Emergency Management Agency (FEMA) may have resources available.
- 3. Choose an appropriate and affordable portable HEPA filter.
- 4. Purchase filters in bulk to get the best pricing.
- 5. Select the community members that will be receiving HEPA filters.
- 6. Create informational outreach material including how to use the HEPA filter and other available community resources. Outreach material should include:
 - a. MERV Rating HVAC filter information
 - b. HEPA filter annual maintenance
 - c. Smoke and health information
- 7. Select a distribution day where you provide the HEPA filter and one filter replacement.
- 8. Follow-up in 12 months when the filter replacement should take place.

Community-wide Clean Air Spaces

Not all community members have a private residential space to create clean air during smoke events, making it important to create community-wide clean air spaces. Public spaces such as libraries, community centers and religious centers may have the capacity to provide clean air refuges for residents without homes. Partnerships are essential for creating effective programs.

- Identify community spaces and reach out to the managers of these facilities.
- Purchase large-scale HEPA filters.
- Partner with organizations that assist unhoused residents.

Resources

Many FAC Net partners have created outreach documents pertaining to smoke and health.

- Room Air Purifier Program: Preparing Your Community for Smoke A How-to-Guide by Smokewise Ashland.
- **Defend What Matters** A guide by the Greater Flagstaff Forest Partnership.
- Resident HEPA Filter Programs: Community Solutions for Creating Clean Air FAC Net webinar featuring stories from three programs across the country.

You can learn from others through training and learning groups, peer connections and professional staff support. Visit <u>fireadaptednetwork.org/join/</u> to learn more!



This document was created by the Fire Adapted Communities Learning Network. FAC Net is a community of wildfire practitioners across the nation that is supported by the United States Forest Service, Departments of the Interior, The Nature Conservancy and the Watershed Research and Training Center. Visit <u>fireadaptednetwork.org</u> to subscribe to our weekly blog and get stories of community wildfire resilience straight to your inbox.