

How Targeted Distribution of Resources Protected Vulnerable Patients During Wildfire Smoke Events

Theme: Communication, Workflow Integration and Equity, Supply Procurement and Distribution

Key Tools: [Wildfire Smoke Action Plan \(WSAP\)](#), [Heat-Health Action Plan \(HHAP\)](#), Screening Tools

Related WSAP Interventions: 2.1, 2.2, 2.3



At a Glance

Wildfire smoke poses severe risks to patients with chronic respiratory conditions, particularly when clinics or health centers lack supplies or clear response workflows. This case study shows how one Pacific Northwest (PNW) clinic used advanced planning and pre-assembled kits to protect vulnerable patients during severe smoke events.

Their strategy included:

- Wildfire Smoke Action Plan (WSAP) workflows
- Pre-event supply procurement
- Kits with N95s, air filters and rehydration kits
- Do-it-yourself (DIY) clean air box fan instructions
- Prioritization of highest-risk patients
- Multilingual education and lobby displays

The Problem

During the devastating 2024 PNW wildfire season, many clinics and health centers without a WSAP struggled to respond. When smoke levels spiked, supplies were scarce and hard to procure. Clinics and health centers were forced into reactive crisis mode. Patients with chronic respiratory conditions like chronic obstructive pulmonary disease (COPD) and asthma faced life-threatening exposure without access to clean air.

The Solution

One Clinic Director took a proactive approach. Recognizing the overlapping risks of heat and wildfire smoke, the Director developed a WSAP and HHAP simultaneously, building common workflows for hydration, cooling, clean indoor air and patient screening.

The WSAP allowed the clinic to:

- Pre-identify vulnerable patients
- Assemble and store kits before smoke events
- Procure supplies early, avoiding regional shortages
- Rapidly notify patients when conditions worsened
- Distribute DIY air purifier materials efficiently during the crisis

This preparation transformed the clinic's response from reactive to coordinated and patient-centered.

Key Lessons Learned

- ✓ Advance planning saves lives.
- ✓ Kits with tangible supplies make education actionable.
- ✓ Overlapping climate risks benefit from unified planning.
- ✓ Equity ensures supplies meet real needs.

How the Work Was Done

Developing the WSAP

The Director sent two providers to a course on climate change action and resilience organized by Harvard C-Change with support from AmeriCares. After the class, staff developed a WSAP and HHAP in parallel, using graphics and tools from the [Climate Resilience for Frontline Clinics Toolkit](#).

Screening tools enabled providers to ask targeted questions such as where they store medications and if they have a clear air/cool space at home. These questions improved engagement and helped identify patients at highest risk.

Assembling Kits

Staff and volunteers assembled kits that included:

- N95 masks
- HVAC filters
- DIY box fan air purifiers with instructions
- Rehydration kits
- Personalizable [tip sheets](#) for patients, given with their medications

Note: Kit contents may vary based on your facility's specific patient demographics and available funding. Use our [action plans](#) for guidance on how to determine the best supplies for your local community.

Distributing Supplies/Kits During Smoke Events

When regional air quality alerts worsened:

- Staff notified patients via SMS and email
- Tables were set up in and around the clinic
- Lobby screens displayed multilingual instructions
- Patients with chronic respiratory disease were prioritized

The clinic anticipated patient needs in advance. They provided [tip sheets](#) during patient visits and allocated supplies, such as masks, in order to meet patient needs. The clinic ran out of some supplies but was able to secure additional donations to meet demand.

Results

The WSAP allowed staff to anticipate patient needs and accelerate response times. By preparing in advance, the team shifted from a reactive posture to a proactive operations model. As one staff member noted, the plan enabled them to “focus beforehand and leverage for the crisis moment.”

Although peak smoke events required extended staff hours, the structured plan significantly mitigated the operational burden on the team. This preparation ensured the clinic could protect all patients who requested supplies while maintaining the inventory levels necessary to deliver targeted donations to those in greatest need.

Beyond immediate relief, these practical resources served as a bridge to broader discussions on weather-related resilience. Staff observed that the visible impact of smoke events made patients more receptive to safety education, noting that “people have seen how the weather is affecting them, and they are more open to talking about it.”

This case study underscores the power of modest, upfront planning. By developing formal protocols, stocking essential supplies and practicing workflows, the clinic significantly improved both patient protection and clinical operations during wildfire smoke emergencies.

Ready to see how these strategies could work in your clinic or health center? Explore our [toolkit](#) and [action plans](#) for more guidance on how to get your facility and your community ready for wildfire smoke.