

Policy Advisory - 2024 Wildfire Smoke Season

Healthy Climate New Mexico

Health Professionals for Climate Action

July 19, 2024

Summary

New Mexico needs to confront the public health risks posed by wildfire smoke. As climate change continues to exacerbate wildfire risk across the United States [1], projections indicate an extended and severe 2024 wildfire season with the potential for unhealthy air quality levels across the state [2]. Exposure to wildfire smoke significantly increases respiratory and cardiovascular health risks, especially for youth, the elderly, people with underlying health issues, and those with housing and access and functional needs. To mitigate these risks and ensure the safety and well-being of all New Mexicans this wildfire season, immediate and comprehensive action is required at all levels of government.



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Key Policy Recommendations

- Establish clear statewide evidence-based occupational air quality (AQ) standards to protect workers.
 Align smoke-related advisories and activation of response plans to these standards for outdoor work and recreational activities.
- 2. Improve public health surveillance systems to capture and timely analyze smoke-and heat-related morbidity and mortality data.
- 3. Expand New Mexico Environment Department's Statewide AQ Monitoring System and fill in areas without coverage with a robust network of open-access consumer-grade air quality monitors.
- 4. Provide safe, accessible, and culturally appropriate clean(er) air shelters equipped with air filtration to provide respite for vulnerable populations during smoke and heat events.
- 5. Public School Capital Outlay funds should be offered by the legislature to transition Schools with evaporative coolers to heat pumps and also provide on-site power back-up to ensure facilities can be safe and cool without exposing students and teachers to air pollution.
- 6. Distribute N95 respirators and air purifiers to low-income households, community centers, public facilities, schools, and community organizations in high-risk areas.
- 7. Use proactive messaging to disseminate clear, consistent, and culturally tailored information about wildfires smoke risks and preventive measures, especially for higher-risk individuals to support their health-related decisions during heat and wildfire smoke events
- 8. Local authorities should identify evidence-based AQ thresholds to postpone or encourage postponing outdoor events and when air quality becomes unhealthy, per the new standards.
- 9. Provide low-income households financial assistance to cover increased utility costs from running air purifiers and air conditioners during smoke events.
- 10. Collaborate with Tribal governments to ensure smoke response resources are culturally appropriate and meet the unique needs of Tribal communities.
- 11. State authorities should investigate innovative opportunities to mitigate the economic impacts of prolonged smoke on workers and employers via subsidies and parametric insurance



Las Conchas Fire near Nambe, NM 2011

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Challenge and Opportunity

New Mexico is facing an unprecedented public health crisis as climate change drives longer and more intense wildfire seasons both in-state and in the surrounding states. Exposure to fine particulate matter (PM2.5) in wildfire smoke has been linked to a wide range of negative health impacts, including respiratory illness, cardiovascular disease, adverse pregnancy outcomes, and premature death [3]. As wildfire smoke becomes a near-annual occurrence in many parts of the state, urgent action is needed to protect public health, especially among vulnerable populations such as children, the elderly, unhoused people, lowincome communities, and those with pre-existing health conditions.

While preventing wildfires and smoke is not possible, New Mexico has an opportunity to mitigate the effects of wildfire smoke by taking proactive evidence-based measures to reduce smoke-related health harms and build more resilient communities. By developing robust smoke monitoring and forecasting systems, providing access to clean air spaces and protective equipment, creating regulatory protection for workers, and educating the public on health-protective behaviors, we can mitigate the worst impacts of wildfire smoke and safeguard the health of all New Mexicans.

Plan of Action To Implement Smoke Policy Recommendations:

To effectively reduce the public health risks associated with wildfire smoke in New Mexico, our state needs a comprehensive strategy encompassing the following measures:

Recommendation 1. Implement Evidence-Based Occupational Air Pollution Standard: Protect workers by developing occupational standards that safeguard them during wildfire smoke events. These regulations should include the distribution of N95 masks, postponement of intense activity work until the air quality is moderate-good (<150 AQI), access to clean(er) air spaces for breaks, monitoring workers for health-related symptoms, and other evidence-based safety protocols. While this needs to be implemented via traditional occupational safety procedures, the process is slow and unlikely to save lives within the next year. State leadership should consider ways an air quality health emergency declaration could rapidly implement these life-saving measures. Occupational air pollution standards already exist in many states, including <u>California</u>, <u>Washington</u>, and <u>Oregon</u>. Evidence-based AQI thresholds should align with state and local-level smoke-related advisories to the public about outdoor activities and, when appropriate, activate emergency response plans across affected jurisdictions.

Recommendation 2. Improve Public Health Surveillance: Enhance smoke-related morbidity and mortality surveillance systems to provide critical information for assessing community risks, establishing baselines, and rapidly sharing information to mitigate health impacts. State officials need to provide resources to modernize systems for capturing and analyzing smoke-related health data in a timely manner. Morbidity and mortality data systems (hospital ED visits, death reporting, EMS calls, and other systems) need to be modernized to ensure timely updates and interoperability. The New Mexico Department of Health is uniquely positioned to facilitate these needed upgrades and should dedicate state-funded staff to

partner with CDC's National Syndromic Surveillance Program (NSSP) to expand tracking of more conditions tied to the health impacts of extreme weather events.

Recommendation 3. Expand New Mexico Environment Department's Statewide Air Quality Monitoring System: Currently, air quality in most of New Mexico is not monitored. New Mexico follows Federal Environmental Protection Agency standards, which only require air quality monitoring in more densely populated areas. This has left large swaths of the state without adequate air quality data to make life-safety decisions. The state budget should fund a network of low-cost PM2.5 monitors to provide real-time, localized air quality data across the state, including in rural and underserved areas. Ensure that monitoring data is openly accessible to the public through a user-friendly online platform and mobile app. Partner with universities (such as New Mexico State University's ZiaMet network), community organizations, and Tribal governments to expand the monitoring network and engage communities in air quality monitoring efforts.

Recommendation 4. Provide Clean(er) Air Shelters: Work with state and local governments and community organizations to establish a network of clean(er) air shelters equipped with air filtration and cooling systems, indoor air quality monitoring, and backup power-generation capability. Prioritize facilities in low-income and high-risk communities. Ensure shelters are accessible, culturally appropriate, adequately staffed, and resourced to accommodate vulnerable populations during prolonged smoke events. This should include allowing pets.

Recommendation 5. Support Schools in Transitioning to Heat Pumps or Air Conditioning:

Include in the state public school capital outlay budget financial assistance for schools that currently rely on evaporative coolers to transition to heat pumps, and for sufficient remote power-generation to keep at least a major portion of the schools safe from heat and smoke. This will ensure schools can maintain safe and comfortable indoor environments during smoke events without compromising air quality. Prioritize schools in low-income communities at higher risk from extreme heat.

Recommendation 6. Distribute Protective Equipment to Vulnerable Populations: Partner with community organizations that regularly provide services to vulnerable populations (youth and the elderly, the unhoused, people with chronic diseases, and low-income New Mexicans) to distribute equipment such as N95 respirators and air purifiers and provide education on proper use. Ensure community centers, public facilities, schools, and other community spaces in high-risk areas have air purifiers. Prioritize distribution to populations with high rates of respiratory illnesses or exposure to smoke that make them more vulnerable to the health impacts of smoke.

Recommendation 7. Proactive and targeted messaging: Use various media platforms to disseminate clear, consistent, and culturally tailored messages about the risks of wildfire smoke and preventive measures to the general public and targeted messaging to higher-risk individuals and communities. This should include smoke from wildfire incidents on both public and private lands. Instead of waiting for media interest or opt-in notification systems, proactively engage community leaders, elected officials, healthcare authorities, and other trusted sources of information to disseminate smoke-safety information. This would expand currently existing collaborations between the US Forest Service, National Weather Service, NMED, and NMDOH. Establish comprehensive contact lists of Tribal leaders, health-focused organizations, and community service organizations to notify when wildfire smoke is forecast. Collaborate with these recipients to deliver culturally appropriate and demographic-specific messaging.

Recommendation 8. Postpone Outdoor Events and Activities During Unhealthy Air Quality:

Local authorities should postpone public outdoor events and activities (school events, public fairs, etc.) and encourage the postponement of private events when air quality reaches <u>unhealthy levels</u>. Develop clear guidelines and communication protocols for event organizers, schools, and sports leagues to ensure consistent and timely decisions about canceling or relocating outdoor activities. Establish relationships with event organizers, sports associations, and schools before a smoke event to notify them of these guidelines and answer questions.

Recommendation 9. Protect Vulnerable Populations from Utility Disconnections: Utility companies should be discouraged from disconnecting electricity during periods of unhealthy smoke. Local and state authorities should work with utilities to develop a program that mitigates the impacts of delayed payments, subsidizes expenses, or fully waives utility costs for low-income households during wildfire smoke events. Moratoriums can trap low-income households in debt. Information about utility shutoff programs must be widely disseminated and easily accessible to ensure all residents, regardless of their financial situation, can maintain a safe indoor environment. If utility companies need to shut off power to prevent or reduce the impacts of wildfires or reduce the impacts of excessive grid demand, proactive measures must be taken to reduce the impacts on vulnerable individuals and communities. This should include people who rely on electricity-dependent, durable medical and assistive equipment and devices.

Recommendation 10. Collaborate with Tribal Governments on Smoke Response: Partner with Tribal governments to ensure smoke response resources, including clean(er) air shelters and protective equipment, are culturally appropriate and meet the needs of Tribal communities. Collaborate with Tribal leaders to develop smoke communication materials that are culturally relevant and disseminated through trusted communication channels.

Recommendation 11. Mitigate Economic Impacts through Innovative Financial Solutions: State authorities should develop a comprehensive smoke event economic relief program that combines subsidies and parametric insurance options. This program should include (1) Temporary unemployment benefits or wage subsidies for workers affected by air quality concerns; (2) Small business assistance through grants, low-interest loans, or tax relief for impacted enterprises; and (3) Exploration of parametric insurance solutions that provide rapid payouts based on predefined air quality thresholds. Collaborate with state, local, and private-sector stakeholders to design and implement these financial mechanisms, ensuring they address the diverse needs of workers, businesses, and industries affected by prolonged smoke events. This approach aims to create a more resilient economic ecosystem in the face of increasing wildfire smoke.



Haze caused by wildfire smoke

Conclusion

Smoke from wildfires in New Mexico and across the country increasingly threatens the health and well-being of New Mexican communities. The eleven recommendations outlined in this policy advisory provide a roadmap for reducing smoke-related health harms and building more resilient communities across New Mexico. As public health professionals, we strongly urge elected officials, response agencies, and community leaders to treat wildfire smoke as a public health emergency and take immediate action to implement these evidence-based strategies.

HB104, introduced in the 2024 legislative session, provided one path toward achieving many of the Recommendations included in this Wildfire Smoke Policy Advisory. An updated version of the bill is to be introduced in the 2025 session.

By prioritizing the health of our most vulnerable populations and investing in proactive measures to mitigate the impacts of wildfire smoke, New Mexico can save lives and quality of life for many of our people. The time to act is now before the next smoke event puts lives at risk. With bold leadership and sustained commitment, we can create a healthier, more equitable future for all New Mexicans.