



## **Public Health Impact of Prescribed Fire: Brief Summarizing a Report on Listening Sessions**

November 8, 2021

“We need to be burning a lot of material out here. And we all know, everyone who has land out here has to deal with a lot of material, a lot of branches falling and little trees growing up. It’s definitely a big part of our lives out here. And it [prescribed fire] feels completely necessary if we’re to survive at all.”

- Sierra Nevada foothills resident, stated during a Listening Session held by the California Department of Public Health



This Brief summarizes a Report of two virtual Listening Sessions conducted by the California Department of Public Health (CDPH) with residents in the Sierra Nevada foothills to gauge community knowledge, attitudes, perceptions of the public health impacts of prescribed fire, and messaging preferences.

The authors would like to extend a heartfelt thanks to the participants in the Listening Sessions for generously taking the time to share their thoughts and experiences on wildfire and prescribed fire.

## **FINDINGS FROM THE LISTENING SESSIONS**

California is facing a turning point in its relationship with wildlands and fire. To reduce the risk of wildfires and restore forest health, the State plans to substantially scale up vegetation treatment of land, including the use of prescribed fire. This increase, while commensurate with the need to reduce wildfire risk, also raises concerns about potential public health impacts of increased smoke from prescribed fire. In light of this issue, CDPH held two Listening Sessions to hear from community members in high wildfire risk areas, Nevada and El Dorado Counties, December 2020.

**Attitudes:** Participants voiced clear support of prescribed fires, viewing them as necessary to reduce the potential for life-threatening wildfires, but they are seeking more information and notification and are mindful of the need for proper oversight to prevent escaped fire.

**Health effects and symptoms:** The health effects reported suggest that residents experience symptoms and conditions from smoke that impact their health and quality of life. Smoke caused health symptoms for nearly all of the participants. Health issues were perceived as primarily occurring with wildfire smoke, particularly during large wildfire episodes.

Furthermore, participants reported that the disruption to their normal routines impacted their quality of life. Participants also reported stress with the smell of smoke.

**Health- and exposure-protective behaviors:** Although participants perceived themselves as relatively knowledgeable about health-protective measures, they nevertheless encountered obstacles to taking some of these actions. They cited the inability to purchase equipment during the wildfire season and confusion about which products, e.g. air cleaning devices, were effective, or cost-effective.

**Messaging and communication needs:** Participants voiced the sentiment that current community notification efforts are inadequate. This relatively well-informed group is accustomed to facing both wildfire risk and prescribed fire, yet only a minority reported currently receiving notifications for prescribed fire.

While residents in these high wildfire risk areas are generally supportive of prescribed fire, they reported that the uncertainty of smoke source triggers anxiety and creates an urgent need for them to determine whether the smoke is from a wildfire or prescribed fire. For this population, accurate and timely notification about prescribed fires is viewed as not merely helpful, but essential.

Participants expressed a clear desire for an authoritative, centralized source for information about prescribed fires, wildfires, and air quality. Residents reported trouble navigating various websites and confusion as to what were the best sources.

Similarly, participants articulated a strong desire for more specific information about prescribed fires, e.g. the window of time and where smoke would be expected, who was conducting and overseeing it, and notification when it was determined that it would occur.

Technology shortcomings were also cited, as many recounted how their internet is not reliable or how local connections can become overwhelmed during times when a fire or smoke is present. They suggested phone or text-based alternatives and noted that some residents lack smart phones.

As local landowners often conduct their own burns, residents identified the need for a system to easily report burns and notify neighbors, which would also help create more clear air days in their community. The suggestion was made to increase the number of green waste disposal days to reduce the need to burn excess vegetation.

**Education needs:** Participants expressed a strong desire for more education about the benefits and procedural aspects of prescribed fire. In addition to a media campaign, they suggested local activities, in partnership between fire agencies and community organizations. They mentioned frameworks such as Firewise and Fire Adapted Communities as mechanisms to incorporate prescribed fire education. They also advocated for the systematic provision of education about prescribed fires and wildfires for newcomers.

**Equity:** Participants expressed concern for residents unable to access resources to protect themselves, and supported efforts at finding ways to get health protective measures into the hands of those in need.

**Indigenous communities:** Participants suggested tapping the knowledge of indigenous communities about prescribed burning.

## **CONCLUSION**

The Listening Sessions generated numerous and wide-ranging suggestions for protecting health and quality of life. Participants voiced strong support for prescribed fire to reduce life-threatening risks from wildfires, while emphasizing the importance of safety measures, as well as a need for more effective messaging, including alternative methods not internet-dependent.

The positive exchanges that spontaneously occurred reinforce the value of community, suggesting that current public health and emergency preparedness recommendations to form smoke- and wildfire-resilient communities would not only improve safety and health, but would have the added benefit of enhancing community members' overall quality of life.

These findings support the value of proactive messaging and development of effective communication channels to help communities prepare for both wildfire and prescribed fire seasons.



Photo courtesy of Lenya Quinn-Davidson

Contents of the Brief are solely the responsibility of the authors and do not necessarily represent the official views of CDPH or any other agency or entity. Reference to any specific product or entity is not an endorsement.

Suggested citation: Hoshiko, S., Mello, A., Jones, CG., Prudhomme, J. (2021). Environmental Health Investigations Branch, Center for Healthy Communities, California Department of Public Health. Public health impact of prescribed fire: Brief summarizing Report on Listening Sessions with community members, El Dorado and Nevada Counties, California. California Department of Public Health, Richmond, CA.  
For a copy of the full report contact: [sumi.hoshiko@cdph.ca.gov](mailto:sumi.hoshiko@cdph.ca.gov) or (510) 620-3620.

This project was supported by a grant from the California Department of Forestry and Fire Prevention's (CAL FIRE) Forest Health Research Program (Agreement #8GG19803), as part of California Climate Investments. California Climate Investments is a statewide program that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas (GHG) emissions, strengthening the economy, and improving public health and the environment—particularly in disadvantaged communities.

Cover photo courtesy of Jamie Ervin