

# Learning to Live With Smoke: Smoke Risk Communication Strategies from Rural and Tribal Communities in North Central Washington

***“We didn't see these kind of socked in situations, but very rarely before, and oftentimes, not more than a day or two, right. Now we're seeing it for days on end where you just don't see the sun.”***

**- Emergency Management Interviewee, Non-Tribal**

As wildfire seasons increase in frequency and intensity, the Pacific Northwest is facing a public health crisis of extreme wildfire smoke. Rural and tribal communities in the Okanogan River Airshed Emphasis Area (ORAEA), which includes the towns of Omak and Okanogan, as well as the Western Colville Reservation, are highly impacted by smoke from both wildfires and prescribed fires. Because of this, communities in the ORAEA have a unique perspective and practiced expertise in smoke readiness and communication.

Through a series of interviews and focus group discussions, we sought to learn from the perspectives of tribal and non-tribal community members in the ORAEA about how they approach wildfire smoke risk communication. From these conversations, we distilled the strengths and challenges that interviewees identified into themes and developed a set of six recommended actions to share with other communities in the region who are similarly impacted by smoke.

Research for this brief was completed as a collaboration of the Confederated Tribes of the Colville Reservation, the Okanogan River Airshed Partnership, and the University of Washington. For more information on how to carry out these recommended actions, [please see the full report.](#)



**SCHOOL OF ENVIRONMENTAL  
AND FOREST SCIENCES**  
UNIVERSITY of WASHINGTON  
College of the Environment



**ENVIRONMENTAL  
& OCCUPATIONAL  
HEALTH SCIENCES**  
SCHOOL OF PUBLIC HEALTH  
UNIVERSITY of WASHINGTON

## RECOMMENDED ACTIONS

Effective smoke risk communication is rooted in community perceptions of risk, delivered through trusted channels, and addresses barriers to action. Thus, smoke risk communication strategies must:

1. Clarify what is known about the short-, medium-, and long-term impacts of wildfire smoke, including mental health impacts.
2. Clarify the actions people can take to mitigate the health impacts of smoke exposure.
3. Coordinate between local groups to ensure accuracy, consistency, and reach of risk communication.
4. Emphasize one's health and health of one's community as central to wildfire resilience.
5. Emphasize smoke-readiness and preparation.
6. Address and mitigate increasingly frequent and severe wildfires.

## GAPS AND OPPORTUNITIES

Staying indoors is the most common strategy for protecting against smoke; **challenges include weatherizing older homes and the expense of air purifiers, masks, and new filters.**

There is a need to **shift from reaction to preparation and smoke-readiness** in advance of smoke season.

Future efforts may include **developing tools** for personal and organizational risk assessment and preparation, timely and locally accurate **air quality information**, and **reducing non-wildfire sources** of smoke.

## PERCEPTION OF HEALTH IMPACTS

Participants expressed concern and uncertainty around the health and lifestyle impacts of smoke. While there were many personal anecdotes of physical impacts during smoke events, **concern was greatest for other people in the community whom participants viewed as especially at-risk** such as elders and older adults, children, people who are unhoused, outdoor workers, and those that have underlying respiratory conditions. Beyond physical health impacts, participants also emphasized mental health impacts and changes to lifestyles and cultural activities.

Smoke is generally viewed as less of an urgent concern compared to the immediate threat of wildfire destruction. Many participants felt a **lack of control** around reacting to smoke events and that there is a **cultural attitude around "toughness" associated with a rural lifestyle** in enduring smoke.

## INFORMATION SHARING & TRUSTED SOURCES

Most residents get their information from sources such as local government agencies, community information boards, local news, informal community networks, and social media. **Facebook is by far the most commonly used channel for information.** Local and tribal agencies are generally more trusted than state or federal government because the information is locally and culturally relevant and comes from sources with whom residents have past experience. Firefighters and fire departments are especially well-trusted sources.

For non-tribal members, **political ideology influences trusted channels of information.** For example, some people may have a complicated view of public health agencies due to messaging around COVID-19.

## PERCEPTION OF PRESCRIBED FIRE

Poor forest management and fire exclusion are perceived as exacerbating wildfires. **Tribal participants described a history of burning as a cultural practice** used to manage landscapes and regenerate ecosystems. **Most participants viewed prescribed fire as relatively safe and beneficial** but while prescribed fire was appreciated for its role in mitigating wildfire risk, they emphasized that the **smoke impacts on communities also needed to be acknowledged.**

***"The messaging, if it's tailored correctly, and if it's local, tied into and accurate for these various communities, and put out by the tribes, it's generally well accepted."***

**- Healthcare Interviewee, Tribal**

