The Oregon communities of Oakridge and Westfir have historically been ranked amongst the top 20 communities in the United States with the worst air quality due to high concentrations of particulate matter (PM2.5) from home wood heating (wood stove) and wildfire smoke. We partnered with Oakridge Air, a community-level program funded by the US Environmental Protection Agency and Lane Regional Air Protection Agency, that seeks to mitigate health threats from smoke-related poor air quality in Oakridge, to conduct a pilot study.

**Approach:** We conducted interviews with 22 key informants and community leaders from the Oakridge-Westfir community between April and June of 2022. The key informants were purposively chosen for this pilot study because they provided a connection to multiple parts of the Oakridge-Westfir community. We asked respondents questions related to community understanding of air quality information, effective communication sources, community preparedness for smoke events, and smoke-related air quality concerns and behaviors. These pilot data will be used to inform future research about air quality in the community.

### UNDERSTANDING AIR QUALITY INFORMATION

**Do you think community members:**

- know where to find air quality information? (n=22)
  - Some, 45%
  - Yes, 32%
  - No, 18%
  - Unsure, 5%

- know how to understand air quality information? (n=14)
  - No, 43%
  - Some, 29%
  - Yes, 21%
  - Unsure, 7%

**Have you heard of anyone struggling to find or understand air quality information? (n=20)**

- Yes, 20%
- No, 75%
- Unsure, 5%

*People know where to find [air quality information, but I'm] not sure about understanding the information. They know how to understand it in simple terms like ‘healthy’ or ‘unhealthy.’*

### EFFECTIVE COMMUNICATION SOURCES

**What have you found to be effective ways of communicating? (n=21)**

- newspaper
- mail
- phone/text alerts
- word of mouth
- community gatherings
- social media
- community events
- flyers
- public meetings
- website
- bulletin board
- newsletter
- email

**What information sources does the community rely on? (n=16)**

- community events
- social media
- word of mouth
- print newspaper
- online newspaper
- public meetings
- local tv
- website
- newsletter
- flyer
- bulletin board
- email
- website

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OAKRIDGE AIR COMMUNITY INTERVIEWS ON AIR QUALITY AND SMOKE

FACT SHEET 26 • SUMMER 2022
SMOKE-RELATED AIR QUALITY CONCERNS AND BEHAVIORS

Do you feel prepared for smoke events? (n=20)

- Yes, 80%
- No, 20%

Reasons people felt prepared:
- Air filters or purifiers (n=13)
- Face masks and/or respirators (n=4)
- The ability to evacuate if needed (n=3)
- An evacuation plan (n=2)
- Well sealed homes (n=2)
- Heat pumps in their home (n=1)
- Access to information (n=1)
- Breathing medications (n=1)

Do you think the community feels prepared? (n=19)
- No, 47%
- Some, 21%
- Yes, 16%
- Unsure, 16%

Are there tools, resources, or information you wish you had to be more prepared?

Resources
- For individuals:
  - Continuation of the air purifier program
  - KN95 masks and/or respirators with information about how to use them
  - Options for junk/debris disposal other than burning
  - Emergency preparedness resources and training
  - Improving individual home insulation and heating systems

- For organizations:
  - Funding for businesses that have to close during smoke events
  - Cleaner air shelters, specifically for senior populations
  - Additional purifiers at local businesses and community gathering spaces

Information
- Community-level strategies and information:
  - Community meetings on emergency preparedness topics (beyond smoke)
  - Outreach and education about air quality sensors and PurpleAir
  - The health implications of smoke

SMOKE-RELATED AIR QUALITY CONCERNS AND BEHAVIORS

Do you have any concerns about air quality in Oakridge-Westfir? (n=21)

- No, 14%
- Yes, 86%

Do you worry about the negative health impacts from the air you breathe in Oakridge? (n=21)

- No, 29%
- Yes, 71%

Responses included:
- Stay indoors and abstain from outdoor activities
- Create a clean air space
- Check the Air Quality Index
- Wear a face mask or respirator
- Use an inhaler
- Do not burn on red days

Do you think the effects of air quality are a big concern for the community at large? (n=21)

- Yes, 71%
- No, 19%
- Some, 10%

Do you think the broader community is aware of the negative health impacts caused by smoke? (n=21)

- Yes, 60%
- No, 15%
- Unsure, 15%
- Some, 10%

What types of smoke or poor air quality worry you most? (n=18)

- Wildfire: 89%
- Backyard burning: 44%
- Woodsmoke: 44%
- Prescribed fire: 16%
- Other: 11%

Do you do anything differently because of this?

- Yes, 71%
- No, 24%
- Some, 5%

People are busy living their lives. Unless they see the smoke they are breathing, they don’t stop to think about it.

Do you do anything differently because of this?

“...when the air quality is over unhealthy... we’re waking up and checking the AQI with the daily temperature. I feel trapped. You can’t take care of yourself. You can’t open the windows because you can’t get that fresh air. It’s almost as if the air itself is trying to kill you.”

“This research is a collaboration between the University of Oregon and Oakridge Air.”