







## Wildfire Webinar Series with San Joaquin Valley (22RD018)

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## Likelihood of wildfire risk has increased 25% in California & Poor Air Quality

Affecting communities especially in San Joaquin Valley (SJV)

Particularly marginalized, vulnerable are low-income communities, farmworker communities, monolingual Spanish speakers

Fewer resources to combat wildfire & smoke in these communities

Struggle to access resources in Spanish

Brown, P. T., Hanley, H., Mahesh, A., Reed, C., Strenfel, S. J., Davis, S. J., Kochanski, A. K., Clements, C. B. (2023). Climate warming increases extreme daily wildfire growth risk in California. Nature. Modaresi Rad, A., Abatzoglou, J. T., Kreitler, J. R., Alizadeh, M. R., Aghakouchak, A., Hudyma, N., . . . Sadegh, M. (2023). Human and infrastructure exposure to large wildfires in the United States. Nature Sustainability, 6, 1343-1351.



Environmental Justice & Co-Liberate Framework Guided Planning of Wildfire Webinar Series

Privileges enlisting the voices and concerns of marginalized communities including farm workers

Emphasizes investigating and documenting context and community level vulnerabilities compounding risks in addition to individual level risk for wildfire

Emphasizes health of communities as a priority

Links environmental justice considerations with public health, climate action, and disaster planning Wildfire Community Vulnerability Framework also guided wildfire webinar planning

- Monolingual Spanish speakers
- Socioeconomic status: Low-income communities
- Housing Mobile Homes
- Multi-generational households
- Demographics: Households with family members with disabilities, family who are >65, rural, mixed status families



Davies, I. P., Haugo, R. D., Robertson, J. C., & Levin, P. S. (2018). The unequal vulnerability of communities of color to wildfire. <u>PLOS ONE, 13(11), e0205825</u>. Fig 1. This wildfire vulnerability framework reflects both the potential of wildfire and the adaptive capacity of a census tract. Outer wedges represent the respective components of wildfire hazard potential and census tract adaptive capacity, though the size of the wedges does not correspond to any weighting scheme.

## Webinar Series Planning

- Making webinars accessible to the community
  - Hosting webinars at suitable times e.g., early evenings, virtual, 75-90 minutes in length, Spanish/English live stream translation
- What would interest community residents to attend
- Financial compensation for time, modest stipend
- Topics relevant to community members
- Strategically planning webinars to be held immediately after well attended monthly community steering committee meetings
- First webinar structured as a listening session
- Employing popular education methods, personal lived experiences



## **Recruitment Efforts**

- Door-to-door canvassing
- Advertising on CNC EF's social media channels (Instagram)
- Scheduling webinar immediately following monthly community steering committee meetings
- Advertising at other existing CNC EF in-person or virtual community events
- Building off other community interests & activities: COVID-19 vaccination, voter registration, ITIN assistance, air filter workshops, tree planting, affordable housing assistance.
- #homes canvassed = 1611





# AIR QUALITY/WILDFIRE RESILIENCE & COMMUNITY CAPACITY BUILDING

#### Webinar 1

On May 25th at 5 to 6:15pm we hosted the first webinar. We focused on listening to participants' concerns where they spoke about issues like <u>affordable</u> <u>housing, water quality</u>, <u>air quality</u> and <u>how to</u> <u>respond to natural</u> <u>disasters</u>.

~30 participants

#### Webinar 2

On September 27th from 6 to 7:30 pm. We spoke about climate change and resilience to wildfires. The guest speaker was Jose Pablo Ortiz, Senior Scientist in Climate and Water -Union of Concerned Scientists



#### Webinar 3

On October 26th from 6 to 7:30 pm. We spoke about climate change and the quality of air. The guest speaker was Angel Fernandez, Senior Scientist of Climate Change – Union of Concerned Scientists

#### 40 participants

Webinars structured to implement popular education methods for engagement





Webinar #1 Participant Locations Merced & Stanislaus Counties

~30 participants from Merced County, mostly women/mothers, monolingual Spanish speakers



### W1: Listening Session Enlisting Community Experiences & Concerns with Questions



Q1: What are your community's top 3 concerns? Q2: What issue do you care about most and would move you to action? Q3: If you could

prioritize one of

your

community

concerns, which

would it be?



Q4: Fall 2023 webinar planning about wildfire & smoke impacting community, which topics do you prefer? WEBINAR #1 MAY 25, 2023 Listening sessions to enlist community concerns and personal impact stories. Participants mapped their location and community concerns they are experiencing in their location.

#### Q1: What are your community's 3 main concerns?

Respondents demonstrated that **water quality, air quality, low-cost accessible housing, and emergency planning (especially for wildfires)** were the leading concerns.



## Q4: For fall 2023 webinar planning (September & October) about wildfire and smoke impacting the community. Which topics do you prefer to have covered?

Of the nine topics, respondents preferred **health impacts** and **sheltering measures in the event of a fire** as topics to be covered for the upcoming webinars, followed by **how to prepare and minimize wildfire and smoke impacts** and **what to do in the event of intense and lingering smoke.** 



SJV & ECV Community Concerns related to Wildfire

- More information about health effects of wildfires
- Guidance on finding shelters during evacuations including for undocumented individuals
- Preparing for wildfire in the event of severe smoke
- Who to contact during a wildfire
- Essentials of emergency preparedness including how families with members who have disabilities can prepare
- Availability of post-fire resources including financial, energy & mental health support
- Knowledge about evacuation routes including alternatives to ensure readiness
- Education & awareness about factors that can contribute to wildfire
- Local smoke alerts



Community Level Vulnerabilities that Compound Risk and Response to Wildfires in SJV

- Sub-standard living conditions housing (extreme rent burden)
- Need for information in languages other than English e.g., Spanish, Punjabi
- Poverty
- Unincorporated communities
- Other extreme weather events (flooding, water contamination, extreme heat, drought, wind/dust storms)
- Dry overgrowth after heavy rain
- Illegal trash dumping
- Unhoused community
- Environmental hazards and air pollution from other factors e.g., agricultural practices
- Poor infrastructure and built environment (e.g., paved roads) impacting evacuation routes



## Additional High Priority Community Concerns





Webinars 2&3 with Climate Scientists from Union for Concerned Scientists

Presentations focused on climate change impacts in the SJV and on increasing frequency and threat from wildfire, poor air and water quality impacts

Having community leaders who live in the area, presented in the audience language (Spanish), and are also experiencing wildfire and climate impacts





## 4 BEST PRACTICES for ENHANCING WILDFIRE COMMUNICATION

- Importance of acknowledging and integrating into messaging the cumulative impacts of structural level determinants of wildfire risk (e.g., other extreme weather co-occurrences like extreme heat & wind, level of local govt interaction with community, waste management & code enforcement services, affordable housing, unhoused community)
- Addressing messaging from a Behavior Adaptation Model (BAM).
  Families may not be able to remove themselves from risk environments, need to adapt to those environments
- Community capacity building efforts, solutions must be driven from within communities (intersectional)
- Bi-lingual and Map based communication tool may facilitate community involvement in documenting cumulative factors and understanding best messaging

## Solutions-Oriented Discussions



#### **INTERIORES (HOGAR)**

Cree una sistema de filtración interior fácil y ecónomico cuando permanece en su hogar con un ventilador de caja y un filtro de aire MERV 13



#### Recursos e información

El costo total para la sistema de filtración interior es de \$30.00 - \$40.00 El costo para un filtro de aire MERV 13 de reemplazo es \$15.00 o \$40.00 para un paquete de cuatro filtros.



útiles para las familias incluyen:

#### **AIRE LIBRE (AFUERA)**

Utilice cobre boca KN95 en caso de humo o incandio y cuando la calidad del airo sea muy maia. Asegúrese de colocar su cobre boca correctamente y oprimir la parte sobre la nariz.

PORTANTE: Solamenie, cubre boca 10195 b protego de materia particula (PM 2.5) que os un contaminante relacionado con el humo.

Consejo Lúcete

Puede comprar cobre bocas KN95 por mayoreo en varios sitos de web o tambien puede visitar su farmecia local.

# Long term Solutions Strategies



Supporting policies in California focused on improving health of Californians, policy around cleaner energy sources, sustainable agriculture



Implementing educational curriculum for K-12 but also for adults around wildfires and climate change



Understanding what contributes to poor air quality and health impacts with goal of lowering emissions from harmful sources

# ÚNETE A NOSOTROS MERCED



PROYECTO DE INVESTIGACION PARTICIPATIVA

UNIVERSITY OF CALIFORNIA, MERC DOWNTOWN CAMPUS CENTER

JUEVES , 29 DE FEBRERO 5:00 - 6:00 PM TRAVES DE ZOOM

TENEMOS MUCHO QUE COMPARTIR CONTIGO ACERCA DE Community Capacity Building in Merced and in ECV Merced and ECV conducting 10-week community capacity building workshops

- Community residents participate 2x week Feb-June 2024
- Community driven priorities, experiences
- Collaboratively decide priority community concern
- Collect data
- Analyze
- Convene with stakeholders



