

A scenic photograph of a calm lake surrounded by a dense forest of green trees. The sky is overcast with grey clouds. In the foreground, some tree branches with green leaves are visible on the left and right sides, framing the scene.

Community Engagement Core

Stakeholder Advisory Board Meeting

November 8, 2022



PACIFIC NORTHWEST CENTER

— for —

Translational Environmental
Health Research



Today's Meeting Agenda & Goals

Welcome Introductions	11:00-11:10	Kim & all
CEC Update	11:10-12:10	SAB input on activities & opportunities
Stakeholder Priorities	12:10-12:25	Survey results, discuss how to identify & prioritize
Wrap Up	11:25-11:30	What's next



Role of the SAB

A Stakeholder Advisory Board (SAB) has been developed to:

- represent a range of environmental health stakeholders and expertise,
- **and provide high-level input on CEC and Center activities that aim to understand, engage and expand our network of stakeholders in the PNW.**



SAB Input so far

- **Pilot Project reviewers:** for stakeholder perspective on funding decisions
- **SAB Charter Development:** defining who are stakeholder groups are, the composition of the board, and other important structural areas of SAB
- **Evaluation Survey 2x year:** high-level input on activities, identifying overall interests and QI, input on Meetings structure, staying connected
 - Interest in collaborating with other members: **SAB directory**
- **5-minute surveys** on specific topics

Thank you!

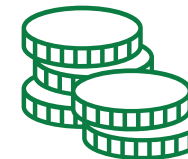
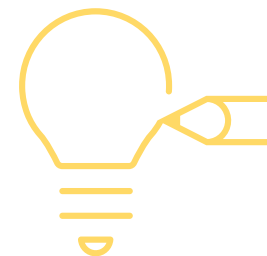
Pilot Project Updates





Pilot Project Updates

- Increased max award to \$40,000
- **Accepting applications until 1/31/23**
(link to the updated webpage in the chat)



Development of a Treatment Decision Aid for Home Environmental Contaminants using a Mobile Approach

Principal Investigator: Dr. Veronica Irvin



Wildfire Smoke Exposure during Pregnancy
Principal Investigator: Dr. Diana Rohlman



Building a study: Bringing together communities, researchers, clinicians, public health, and local health officials to discuss wildfire smoke exposure during pregnancy

Photo by Pixabay



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Study Team: Wildfire Smoke Exposure during Pregnancy



**Diana Rohlman,
PhD**
CEC Director
Oregon State
University



Kim Brown, MBA
CEC Program
Manager
Oregon State
University



**Lynda Crocker
Daniel**
Community
Research Liaison
Oregon Health &
Science University



Katherine Duarte
Program
Coordinator
Klamath County
Public Health

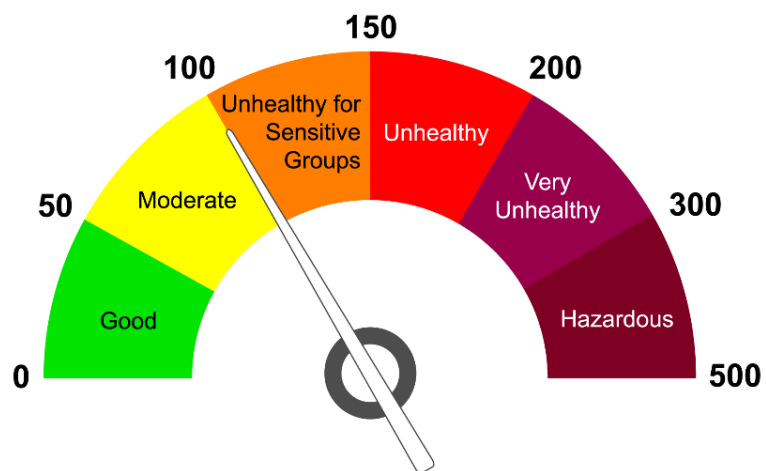


**Jennifer Little,
MPH**
Public Health
Director
Klamath County
Public Health

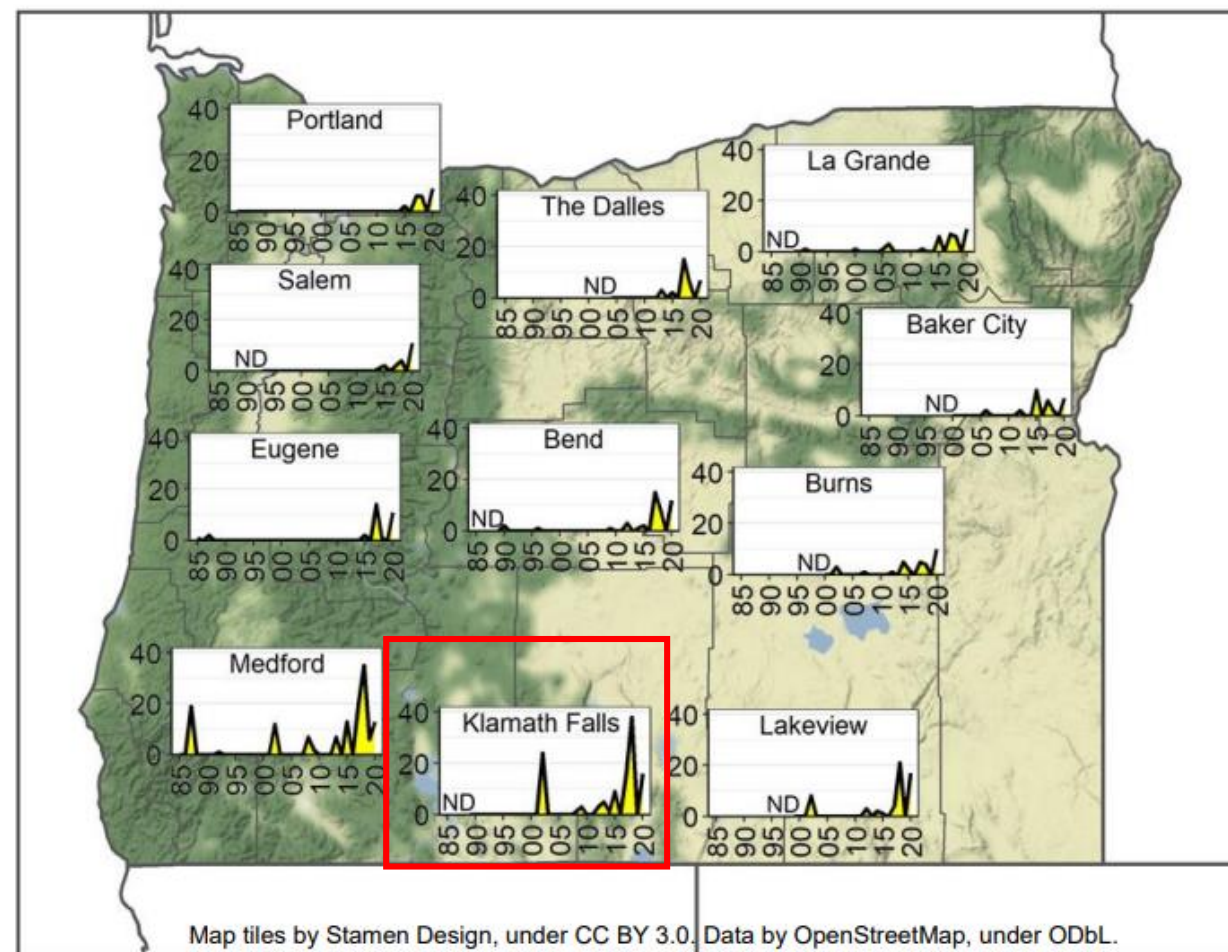


WHY KLAMATH COUNTY?

- High number of days when the Air Quality Index (AQI) is above 100.

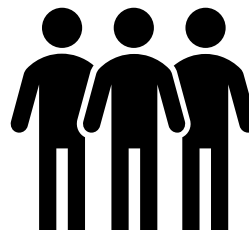


AQI days \geq USG caused by wildfire smoke





A COMMUNITY-ENGAGED RESEARCH STUDY



Exposure
Hazard

Public Health
Concern

Build an
Interdisciplinary
Team

Collaborative
Research



INITIAL STAKEHOLDER COMMUNICATION

36 email recipients with affiliations to...

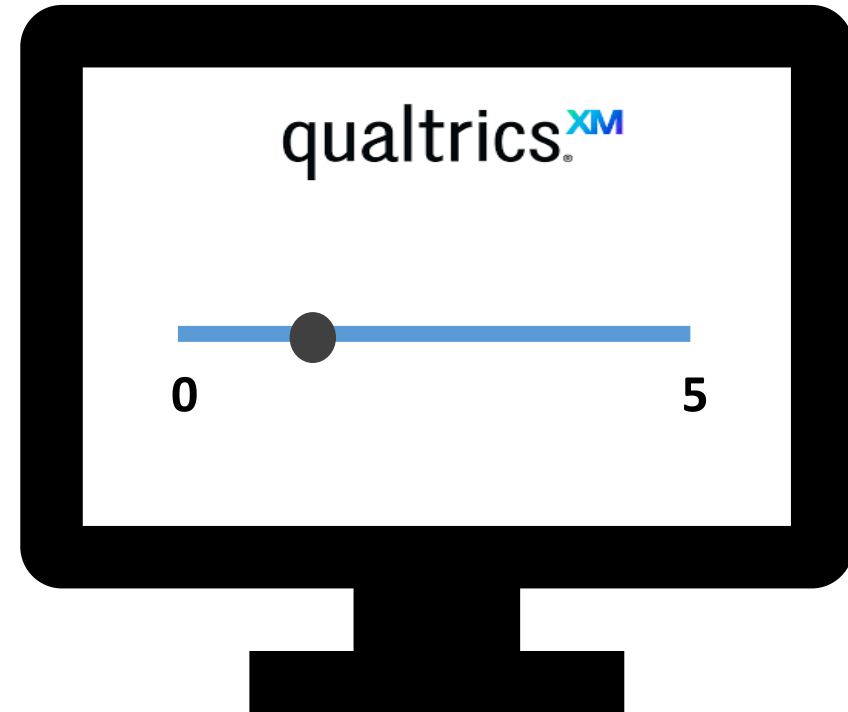


- Oregon Department of Human Services
- Benton County Environmental Health
- Cascade Health Alliance
- Department of Human Services
- Douglas School District
- Healthy Families of Douglas, Klamath & Lake Counties
- Klamath County Fire District
- University of Washington
- Oregon State University
- Oregon Health & Science University
- Klamath County Tribal Health
- Trends on Thriving Workgroup
- Oregon Child Development Coalition
- Take Root Parenting Hub



APPLYING THE DELPHI METHOD

- Link to Qualtrics survey emailed after each meeting
- 15-20 minutes to complete
- Sliding-scale format
- Results discussed at next meeting



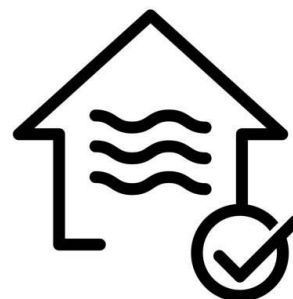


ELEMENTS OF THE STUDY



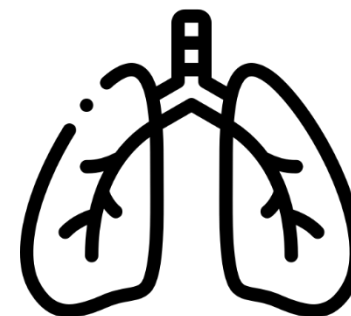
CHEMICALS OF INTEREST

- PM_{2.5}
- PAHs
- Carbon Monoxide
- VOCs / SVOCs



DATA COLLECTION TOOLS

- 1 Personal sampler
- 2 Residential samplers
- Environmental samplers
- Participant surveys



HEALTH OUTCOMES

- Respiratory symptoms
- Gestational age of infant



OUTCOMES OF A COMMUNITY-ENGAGED APPROACH

A team of 26 individuals, representing 12 academic, public health, and community organizations

A funded study with 7 participants and completed sampling

An interactive infographic about how to reduce wildfire smoke exposure during pregnancy



ENGLISH



<https://tinyurl.com/wildfiresmokeguide>

Why is it important for my baby's health to reduce our wildfire smoke exposure?

Wildfire smoke may be more harmful to children and pregnant people, who are sensitive populations.



If you are pregnant and not breathing well because of the smoke, your baby is not either.



Exposure to wildfire smoke during pregnancy may increase the risk that your baby is born early or small.

SPANISH



<https://tinyurl.com/elhumo>

CEC Activities & Alignment Check





National Institute of Environmental Health Sciences
Your Environment. Your Health.

“mission is to discover how the environment affects people in order to promote healthier lives”

<https://www.niehs.nih.gov/>



National Institute of Environmental Health Sciences
Your Environment. Your Health.

Promoting Translation – Data to Knowledge to Action

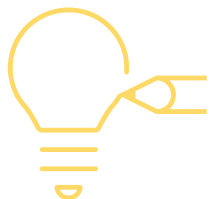
- **Creating Knowledge From Data**
- **Outreach, Communications, and Engagement**
- **Evidence-Based Prevention and Intervention**
- **Environmental Health Disparities and Environmental Justice**
- **Emerging Environmental Health Issues**
- **Partnerships for Action**



Community Engagement Core (CEC) Goals



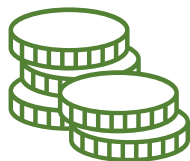
- Enhance and expand **stakeholder engagement** with the Center.



- Represent and identify **emerging environmental health topics**.



- Contribute to a network of expertise across stakeholders to **foster collaboration** and address environmental health concerns.



- **Disseminate opportunities and resources** (stakeholders to scientists, and from scientists to stakeholders)

CEC Activities & Alignment Check

4 Themes





Environmental Health (EH) 101 Video

Theme #1: Resources & Education

The Need

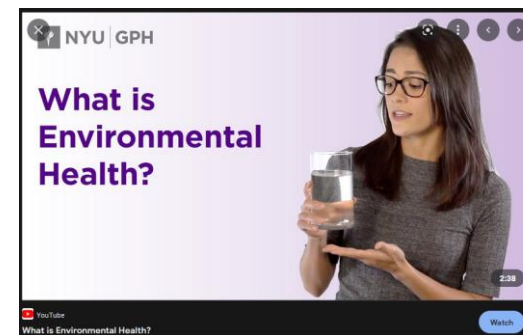
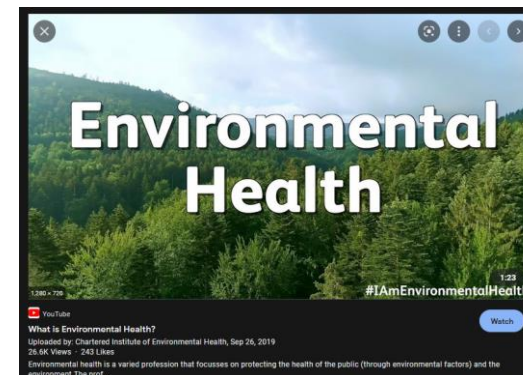
Outreach activities revealed a need for lay audience educational materials for communities less familiar with EH. Community partners would like more clarity around the concept of environmental health to understand and help match resources/address concerns.

Who are the stakeholders?

- Community-based organizations and individuals
- Professionals that engage others about public health concerns

What do we aim to do?

Develop a 3-minute video that provides an introduction to EH, examples of exposures, and points to resources.





Environmental Health (EH) 101 Video

How?

- Identify and review existing EH 101 type resources
- Conduct a needs/gaps analysis
- establish themes with stakeholder input
- Create a storyboard
- Develop a video

Desired Outcomes

- This 3-minute video will be shared broadly and utilized to help build capacity for outreach, community-engaged research and other collaborative opportunities.
- If successful, we will consider creating a series of short videos to address more specific areas of EH (air/water/soil quality, wildfires, pesticides).





Questions & Discussion

General questions about the EH 101 Video?

How well does EH101 short video align with the NIEHS and CEC goals and mission?

Given limited staff, time and resources, is this an appropriate focus for the CEC?



Identifying & Supporting Community Initiated Projects

Theme #2: Community- engaged Research

The Need

Research often starts with a scientist's question and results in a peer reviewed publication. Communities also have important research questions but they often need support finding expertise and resources, and writing grants to develop and implement projects.



Who are the stakeholders?

Community-based organizations, government agencies, including public health, community groups such as neighborhoods and parents, etc.

What we do

The CEC provides consults, connections to expertise and resources to help move project ideas forward.



Identifying & Supporting Community Initiated Projects

Theme #2: Community- engaged Research

How?

The CEC has been working on strategies to increase engagement with a variety of stakeholders through the OHSU Community Liaison team and OSU Extension Agents who live and work in their communities. The CEC aims to partner on one community-initiated research project per year.

Desired Outcomes

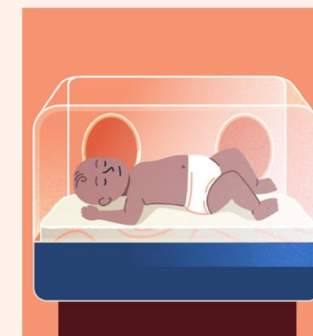
The questions and concerns of the communities that are directly impacted by environmental exposures will be integrated into Center research. Communities will be able to better understand their environmental health concerns for next steps.

Why is it important for my baby's health to reduce our wildfire smoke exposure?

Wildfire smoke may be more harmful to children and pregnant people, who are sensitive populations.



If you are pregnant and not breathing well because of the smoke, your baby is not either.



Exposure to wildfire smoke during pregnancy may increase the risk that your baby is born early or small.



Questions & Discussion

General questions about Community-initiated research?

How well do our current strategies align with the NIEHS and CEC goals and mission?



Theme #3 Reporting Back Data

Reporting Back Data

The Need

Study participants have a right to view their own data, even if it does not have clinical significance. Over 90% of study participants want their own data to inform decisions about what they buy, what they do, and how to improve their health.

Who are the stakeholders?

All study participants and the communities in which they reside.

What do we do?

Provide data in a useful manner (understandable, accessible) that explains what we found, what we know, what it means, and what you (study participant) can do.





Reporting Back Data

Theme #3 Reporting back Data

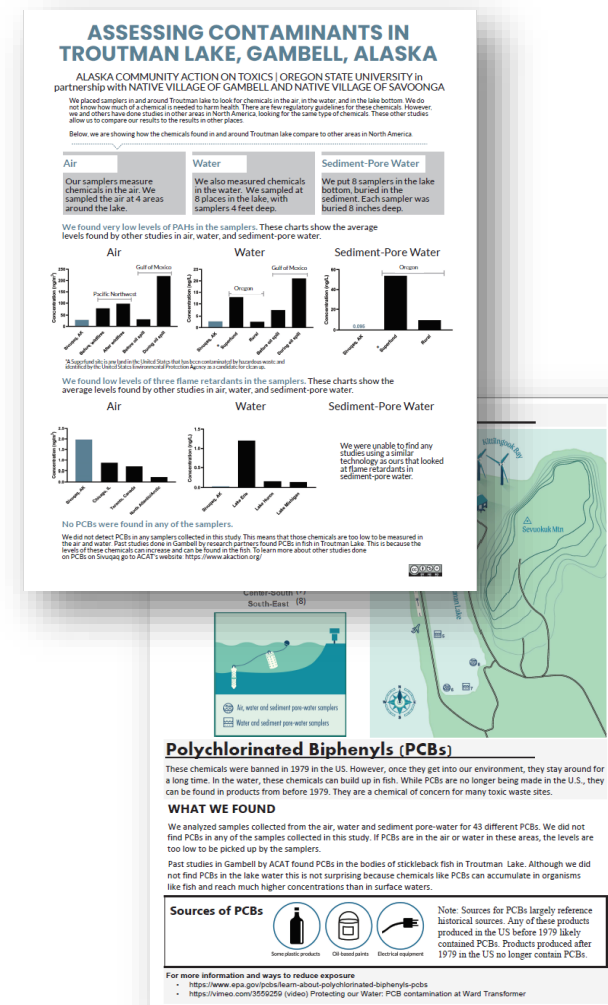
How?

We use infographics and available data to place study results into context. Community-level and individual-level data is available. We have multiple templates for different chemical classes and study designs. While usually oriented to human exposures, we also look at animal exposures (dogs, cats)

Desired Outcomes

Share data to help people:

1. Understand what they are exposed to
2. Provide a variety of resources to learn more
3. Provide ways to reduce exposure





Questions & Discussion

General questions about the sharing data back with participants?

How well does this strategy align with the NIEHS and CEC goals and mission?



Diversity, Equity, Inclusion

Theme #4 DEI

The Need

Scientific processes and methods are thought to be neutral, yet are often influenced by bias. Thus *how* we do research needs to be examined.

Who are the stakeholders?

Researchers

What do we aim to do?

Identify research practices and methods that are based on, or influenced by, biased perspectives. Once identified, such practices and methods can be appropriately revised.



<https://www.cnn.com/2021/04/25/health/race-correction-in-medicine-history-refocused/index.html>



Diversity, Equity, Inclusion

Theme #4: DEI

How?

Reaching out to NIEHS researchers to identify datasets, practices, and methods that may have intentionally or unintentionally incorporated bias.

- Spirometry
- Infant growth curves
- Artificial intelligence datasets

Desired Outcomes

Identify problematic datasets, practices and methods to:

1. Flag datasets, practices and methods for new research
2. Stimulate new research
3. Incorporate diverse viewpoints and perspectives into environmental health research



Questions & Discussion

General questions about CEC's DEI strategies?

How well do our current strategies align with the NIEHS and CEC goals and mission?

Given limited staff, time and resources, is this an appropriate focus for the CEC?

Stakeholder Priorities



Reflecting on the past year, to what extent have the following areas of environmental health been priorities in your work?

Area of EH	Min	Max	Mean	SD	Var	Count
Water Quality	2	4	3.56	0.68	0.47	9
Health Equity/ Environmental Justice	0	4	3.3	1.19	1.41	10
Climate Change	2	4	2.9	0.83	0.69	10
Wildfires	0	4	2.89	1.2	1.43	9
Air Quality	0	4	2.8	1.54	2.36	10
Other	0	4	2.5	1.5	2.25	4
Soil/Sediment Quality	1	4	2.17	1.07	1.14	6
Toxic Waste	0	4	2.14	1.36	1.84	7
Disasters	0	4	1.71	1.16	1.35	7

Other

Pesticide exposures

Fish consumption advisories

Water Quantity/Water Security

Reflecting on the past year, to what extent have the following contaminants been of concern to your work?

Contaminant of Concern	Min	Max	Mean	SD	Var	Count
Pesticides	1	4	3.13	1.17	1.36	8
Particulate Matter (PM2.5)	0	4	3	1.22	1.5	8
Other	0	4	2.67	1.89	3.56	3
Industrial chemicals	0	4	2.57	1.5	2.24	7
Metals	0	3	2.25	1.3	1.69	4
Polycyclic aromatic hydrocarbons (PAHs)	0	4	2.14	1.25	1.55	7
Per- and Polyfluorinated Substances (PFAS)	0	4	2	1.41	2	6
Dioxins and furans	0	4	1.83	1.57	2.47	6
Polychlorinated biphenyls	0	4	1.8	1.6	2.56	5
Flame retardants	0	4	1.67	1.37	1.89	6
Endocrine disruptors	0	4	1.57	1.18	1.39	7
Personal care products	0	2	1.14	0.64	0.41	7

Metals

Mn and Pb
Mercury, arsenic

Other

micro/nanoplastics
Nitrates

Please use this space to provide any thoughts you may have about environmental health priorities and concerns.

- **Community experiences** at the forefront of decision making and regulatory modernization.
- I see some great information being shared. I am hoping to see more of it **translated to other languages** so more community members will be aware and start making some changes.
- **Climate change** may result in increased pest pressure and increased pesticide use.
- I am curious about **how Extension faculty can engage** with this work and support improving environmental health knowledge, policies, and systems in our communities.
- We've had to rapidly shift from developing the public health evidence base around water insecurity as an issue, to **developing the public health practice of addressing water insecurity**. Building the evidence base is still needed!



Wrap Up & Next Steps



Next Update via email: by November 14th

- Meeting Notes, confirm what we heard from you
- Ask for 2 Pilot Project Reviewers
- Links to the [SAB Directory webpage](#)
- Charter input until December 31st (optional)



DISCOVERY INDEX: starting with researcher and Center resources



NEXT MEETING

April 2022

THANK YOU!

