

PHAB Accountability Metrics subcommittee

Proposed environmental health priority areas and indicators

March 14, 2023

The following priority areas and indicators have been developed by state and local public health authority staff. The goal is for the PHAB subcommittee to eventually narrow recommendations to 1-2 priority areas and one or more related indicators.

Priority areas	Indicators
Summer heat-related morbidity and mortality	<ul style="list-style-type: none">• Emergency department and urgent care visits due to heat• Hospitalizations due to heat• Heat deaths
Air quality-related morbidity	<ul style="list-style-type: none">• Respiratory (non-infectious) emergency department and urgent care visits• Asthma and allergic disease-related hospital admissions
Water security	<ul style="list-style-type: none">• Number of weeks in drought annually, % of population affected• Health-based violations• Number of/type of advisories, #/% of population affected
Built environment	<ul style="list-style-type: none">• Active transportation: Percent of commuters who walk, bike or use public transportation to get to work• Walkability index• Land use, for example % tree canopy, % green spaces, impervious surfaces, parks, natural areas
Developmental: Mental health effects of climate change	

Reports and resources

American Journal of Public Health	Indicators to Guide and Monitor Climate Change Adaptation in the U.S. Pacific Northwest
American Journal of Public Health	Building Public Health Surveillance 3.0: Emerging Timely Measures of Physical, Economic and Social Environmental Conditions Affecting Health
National Council of State and Territorial Epidemiologists (CSTE)	Climate and Health Indicators
CDC/ATSDR	Environmental Justice Index
Healthy People 2030	
Partnerships for Environmental Public Health	Evaluation Metrics Manual
National Oceanic and Atmospheric Administration (NOAA)	NWS Heat Risk
Clackamas, Multnomah, Washington counties	Portland Regional Climate and Health Monitoring Report
Oregon Water Futures	Website Oregon Water Justice Framework
Klamath County and OSU	Wildfire and Infant Health Study
OHA	Public Health Modernization Manual
OHA	Oregon's Drinking Water Protection Program
OHA	Climate Change and Youth Mental Health Report
OHA	Climate and Health in Oregon, 2020 Report
OHA	Oregon Climate and Health Resilience Plan
Oregon OSHA	Emergency Smoke Rule and Protections

The following list of resources was provided by Cristy Muñoz, Climate resilience and Disaster Response Sr. Manager with United Way of the Columbia Willamette

2020-23 data and relevant research reports overlapping environmental health and public health concerns. Indicators for water security, emergency/disaster prep, heat/air quality, and mental health effects of climate change.

Water

Oregon Futures Water Report 2020-21

Researchers: Oregon Environmental Council, University of Oregon, Coalition of Communities of Color.

Link: [here](#)

Disaster and emergency communications - wildfire/smoke

Oregon Fires Exacerbate COVID-19 Impact on Farmworkers- statewide OR 2020

PSU, OSU, CASA, Bienestar, Centro Cultural, Farmworkers Housing Development, Oregon Law Center, UNETE, PCUN

Link: report [here](#), Oregon rural studies [reports here](#)

The unequal vulnerability of communities of color to wildfire

University of Washington and The Nature Conservancy

Link: [here](#)

- Wildfire vulnerability is spread unequally across race and ethnicity, with census tracts that were majority Black, Hispanic or Native American experiencing ca. 50% greater vulnerability to wildfire compared to other census tracts.

Oregon State University & partners Smoke Ready Communities database

140 fact sheets, resources, guides, and articles

Link: [here](#)

- Group is looking for OHA guidance so we can have a frame of reference.
- Database lacks culturally competent resources to reach underrepresented communities.

Oregon Wildfire Response Protocol for Severe Smoke Episodes June 2022

Link: [here](#)

Wildfire smoke trends and air quality index June 2022

DEQ- State of Oregon. The AQI is useful for calculating trends of wildfire smoke impact on public health.

Link: [here](#)

Disaster Communication with African American, Black Immigrant and Refugee Communities 2022

Researcher: Nhu To-Haynes, Senior Fellow - Portland State University

Contact: tohaynes@pdx.edu

Link: [here](#)

Preparing Oregon's Communities of Color for Disasters 2021-2022

Speaker: Nikka Tahan & Cristy Munoz. Emergency Preparedness Researcher: Nikka Tahan Consulting

Contact: nikka@tahanconsulting.com & cristym@unitedway-pdx.org

Link: [here](#)

Oregon Wildfire Smoke Communications and Impacts: An Evaluation of the 2020 Wildfire Season - University of Oregon
Institute for Resilient Organizations, Communities, and Environment (IROCE, formerly ISE)

Researcher: Heidi Huber-Stearns

Link: [here](#)

Rapid Response Toolkit for Immigrant and Refugee Organizations 2022

Speaker: Ahmed Gaya, Sr. Strategist for Climate & Migration National Partnership for New Americans (NPNA)

Contact: ahmed@partnershipfornewamericans.org

Link: [click here](#)

Mental health & climate change

Climate Change and Youth Mental Health 2022

Speaker: Julie Early Sifuentes, Climate & Health Program - Oregon Health Authority

Contact: julie.sifuentes@dhsosha.state.or.us

Link: [click here](#)

<https://t.e2ma.net/click/yiseei/y2i543j/ii9yrdb>

Characteristics of suicide among farmers and ranchers: Using the CDC NVDRS 2003–2018.

Miller, C. D. M., & Rudolphi, J. M. (2022).

American Journal of Industrial Medicine, 65(8), 675–689.

Link: here <https://doi.org/10.1002/ajim.23399>

The Devastating Drought Across The West Could Mean An Increase In Farmer Suicides.

Woods, L. B. (2021 July 2).

NPR News. <https://www.npr.org/2021/07/02/101113>

Suicide rates are higher among farmers. Some Midwest states are teaching communities how to help. MPR News. Crawford, K. (2022 September 30). <https://www.mprnews.org/story/2022/09/30/suicide-rates-are-higher-among-farmers>

Case, A., & Deaton, A. (2015). Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century.

Proceedings of the National Academy of Sciences - PNAS, 112(49), 15078–15083. <https://doi.org/10.1073/pnas.1518393112>

The Devastating Drought Across the West Could Mean an Increase in farmer Suicides. NPR reporting.

<https://www.npr.org/2021/07/02/1011330302/the-devastating-drought-across-the-west-could-mean-an-increase-in-farmer-suicide>

<https://www.statnews.com/2021/12/29/deaths-of-despair-unrecognized-tragedy-working-class-immiseration/>