AGENDA

PUBLIC HEALTH ADVISORY BOARD
Accountability Metrics Subcommittee

June 2, 2023
11:30 AM – 1:00 PM

Join ZoomGov Meeting
https://www.zoomgov.com/j/1616889251?pwd=YXQyS2RmZEFId0JnTUJMazF5MGIwQT09

Meeting ID: 161 688 9251
Passcode: 157025
(669) 254-5252

Meeting Objectives:

- Approve meeting minutes
- Continue to discuss, and make recommendations for, environmental health indicators
- Discuss upcoming presentation of environmental health indicator recommendations to the Public Health Advisory Board

Subcommittee members: Cristy Muñoz, Jeanne Savage, Kat Mastrangelo, Ryan Petteway, Sarah Present, Jocelyn Warren

PHAB's Health Equity Policy and Procedure

9:00-9:10 AM	**Welcome and introductions** • Approve April 11, April 28 and May 9 meeting minutes • Review group agreements and proceeding with metrics discussions that are person-centered	Sara Beaudrault, Oregon Health Authority
9:10-9:40 AM	**Environmental health indicator recommendations** • Discuss options for framing environmental health priorities and connections to climate. • Discuss recommended indicators. • Continue to discuss opportunities to use metrics to advance racial equity and community engagement	All
9:40-9:50 AM	**Environmental health indicator recommendations** • **Decision:** Is the subcommittee prepared to recommend indicators PHAB? If not, what additional	

	information would the subcommittee like to discuss? • Discuss June 8 presentation to PHAB	
9:50-9:55 AM	**Subcommittee business** • Next steps and summer meeting schedule • Next meeting is currently scheduled for June 13 from 9:00-10:00	All
9:55-10:00 AM	**Public comment**	
10:00 AM	**Adjourn**	All

Everyone has a right to know about and use Oregon Health Authority (OHA) programs and services. OHA provides free help. Some examples of the free help OHA can provide are:

- Sign language and spoken language interpreters.
- Written materials in other languages.
- Braille.
- Large print.
- Audio and other formats.

If you need help or have questions, please contact Sara Beaudrault: at 971-645-5766, 711 TTY, or publichealth.policy@dhsoha.state.or.us, at least 48 hours before the meeting.

April 11 Subcommittee discussion and recommendations

Based on:

- Input provided by state and local communicable disease staff through the CLHO communicable disease accountability metrics workgroup
- Input provided by LPHA officials through consultation, and
- PHAB Accountability Metrics subcommittee discussions and data reviews

The PHAB Accountability Metrics subcommittee

1. Recommends that PHAB adopt sexually transmitted infections and three related indicators for syphilis for public health accountability metrics.
2. Will continue to discuss vaccine preventable diseases and seasonal and emerging respiratory pathogens as possible areas for accountability metrics.
    - The CLHO CD accountability metrics workgroup recommends vaccine preventable diseases and would like the PHAB subcommittee to discuss options for maintaining focusing on seasonal and emerging respiratory pathogens, even if not an accountability metric.
3. Will not continue to discuss Hepatitis C, foodborne diseases, HIV or Tuberculosis at this time.

PHAB Accountability Metrics
Group agreements

- Stay engaged
- Speak your truth and hear the truth of others
- Expect and accept non-closure
- Experience discomfort
- Name and account for power dynamics
- Move up, move back
- Confidentiality
- Acknowledge intent but center impact: ouch / oops
- Hold grace around the challenges of working in a virtual space
- Remember our interdependence and interconnectedness
- Share responsibility for the success of our work together

PHAB Accountability Metrics subcommittee deliverables

1. Recommendations for updates to public health accountability metrics framing and use, including to eliminate health inequities.
2. Recommendations for updates to communicable disease and environmental health metrics.
3. Recommendations on engagement with partners and key stakeholders, as needed.
4. Recommendations for developing new metrics, as needed.
5. Recommendations for sharing information with communities.

PUBLIC HEALTH ADVISORY BOARD
Accountability Metrics Subcommittee

DRAFT MINUTES

May 9, 2023
9:00am – 10:00am

Subcommittee members present: Jeanne Savage, Jocelyn Warren, Cristy Muñoz, Sarah Present, Kat Mastrangelo
Subcommittee members absent: Ryan Petteway
OHA staff: Sara Beaudrault, Kusuma Madamala, Diane Leiva, Kelly McDonald, Rex Larson, Zintars Beldavs, Victoria Demchak, Amanda Spencer
CLHO members: Brian Leon

Welcome and introductions

- Introductions
- Sara reviewed the agenda and group agreements
- Sara provided an overview of where the communicable disease metrics are and how they align with the metrics selection criteria previously developed by the subcommittee.

Vaccine Preventable Diseases
Rex Larson

- OHA recommends narrowing down the vaccine preventable diseases metrics to 2-year-old vaccination rates and adult influenza vaccination rates.
    - An unintended consequence of COVID was a drop in routine vacation rates with 2-year-old vaccinations dropping by 2% and adult influenza vaccinations rates dropping by 9%.
    - This was in large part due to primary care capacity.
    - Public health can work with CBOs and primary care groups to improve outreach, education, and access to vaccines.
    - Selecting these metrics would work towards OHA's goal of ending health inequities by 2030. Communities of color are particularly affected by vaccine preventable diseases and experience a disproportionate burden of disease when compared to white communities.
- OHA recommends a target of an 80% rate for two-year-old vacations and a 70% influenza vaccination rate for populations over age 65.
    - Goal would be to reach both targets by 2030.
    - OHA recommends placing a strong emphasis on reducing disparities between individual races and ethnicities and the statewide average.
        - Goal would be to reduce theses disparities by a minimum of 10% each year.
- Rationale for OHA recommendations:

    - Preliminary data shows 9% drop in influenza vaccination rates for individuals at least 65 years of age from pracademic levels.
        - Hospital capacity is still largely affected by seasonal influenza.
    - Preliminary data shows that the 2-year-old vaccination rate dropped by approximately 2% in 2022 after steadily increasing every year since 2013.
    - The public health system demonstrated ability to address vaccine equity gaps in racial and ethnic groups with the COVID-19 vaccine.
    - Two-year-old vaccinate rates is also a CCO incentive metrics.
    - Both metrics are closely tied to the Healthy People 2030 objectives
- Vaccine preventable diseases are a community priority.
    - Over 160 CBOs were involved with community engagement and outreach strategies for COVID vaccination, and many have expressed interest in applying similar strategies to routine vaccinations.
    - Lessons learned that can be leveraged for routine immunizations:
        - Mobile outreach strategies to reach communities where they are.
        - Culturally and linguistically appropriate communications.
        - Collaboration with community leaders to plan events and outreach.
- Possible strategies:
    - Community outreach
        - Provide culturally relevant outreach and education.
        - Collaborate with community organizations, heath care providers, and other partners.
        - Conduct mobile vaccine outreach for hard-to-reach communities.
    - Use of public health data
        - Identify populations with limited access to immunization services.
        - Identify groups placed at increased risk of severe disease outcomes.
    - Healthcare provider partnerships
        - Promote participation in the Immunization Quality Improvement for Providers (IQIP) program with local VFC enrolled clinics.
- Data source for both indicators is ALERT IIS
    - There is no REALD or SOGI data for ALERT IIS, although it does collect race and ethnicity
- Rex provided overview of 2-year-old vaccination rates from 2014-2022 noting the rise in vaccine rates starting in 2014 and the fall in 2022. Even though the fall is only 2% it is worrisome because it could be the start of a downward trend and it can be hard to build back up momentum for vaccines.
    - Sarah P: If the CDC updates their definition of “up to date” for vaccines, will we update that as well? For example, the COVID vaccine is not recommended for 2-year-olds.
        - Rex: This particular series that we will be tracking for two year old vacations (4:3:1:3:3:1:4) has remained stable over the last 10 years and does not change often. The 4:3:1:3:3:1:4 series does not include COVID or seasonal influenza vaccines.
    - Kat: Looking at the 2-year-old vaccination rates data, all the vaccine rates seem similar except the rotavirus which is lower. Why is that the case?

        - Rex: It has been low for a while, but it is improving. The rotavirus is also not included in the 4:3:1:3:3:1:4 series.
- Rex reviewed a map breaking down the 2021 two-year-old vaccination rates by county.
    - There are urban-rural disparities.
    - In many counties there is a single provider, or a group of providers, that has really driven an increase of vaccination rates in those counties. Having provider involvement will therefore help make these goals more achievable
- Rex reviewed adult influenza data starting from 2017 going to 2023.
    - There is a significant drop in influenza vaccination rates in the 2021-2022 flu season.
    - The drop in the 65+ age group is more significant than the other groups, because they in general are more likely to get the influenza vaccine.
        - The younger age groups have historically had lower influenza vaccination rates so we will likely see more of an impact by focusing on the 65+ age group.
    - Kat: Is the influenza vaccination rate for the 65+ age group ever tracked by living situation? For example, do we know if there are differences in vaccination rates for folks in assisted living situations?
        - Rex: The vaccination rates for people in assisted living facilities tend to be a bit higher, but we cannot track it using ALERT IIS data. There is another group that looks at vaccination rates in those communities, but the data is quite different making it difficult to compare it to ALERT IIS data.
- Rex reviewed adult influenza vaccination rates by race and ethnicity from 2018-2021 and highlighted the disparity in Black and Latinx communities when compared to the state average.

Discussion

- Sarah P: Much of the successes made in the COVID vaccination response hinged on the COVID vaccine being free. The ability of public health and CBOs to improve vaccination rates will be more difficult with paid vaccines.
    - Rex: The immunization program has been talking about this issue for quite a while. PHAB might be able to highlight the issue with the payment model for adult vaccines and hopefully can come up with adjustments for folks who can't afford them.
    - Kelly M: If we hear from PHAB that they want to make changes to the payment model then that is something we would look at.
- Sara B: One of the reasons we recommend the adult flu vaccination rates as a metric is that it is a direct connection to discussions had by the CHLO metrics subgroup about how to reflect the work of state and local health authorities to be needing to respond to seasonal and emerging respiratory pathogens.
- Cristy: When metrics are developed how do governmental public health officials communicate and work with community leaders to develop a shared understanding? Within the metrics that we develop as a subcommittee can we also provide recommendations about how to achieve those metrics?
    - Sarah P: In the past with metrics, it really has just been up to the counties to determine how they are going to meet the metrics. With this new focus on trying to bring accountability more than local governmental public health, there is a need for a common understanding of best practices to meet those goals. This will probably

include coming together on funding and we have had previous conversations around having metrics on staffing.
    - Rex: Drafting process measures will allow for us to focus more on what is necessary to achieve these metrics which could include things like communication and outreach.
    - Cristy: It is important to develop that process piece and to make sure that we are being clear in our communications to communities and avoid using confusing language like “accountability recommendations” as those two words have very different meanings.

Subcommittee business

Sara B

- Subcommittee agreed to bring the OHA recommendations for vaccine preventable diseases metrics (adult influenza vaccination rates and two-year-old vaccination rates) to PHAB.
- Subcommittee will have another meeting in late May 2023.
- No public comment.

Meeting was adjourned

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	• Emergency department and urgent care visits due to heat • Hospitalizations due to heat • Heat deaths
Air quality-related morbidity	• Respiratory (non-infectious) emergency department and urgent care visits • Asthma and allergic disease-related hospital admissions
Water security	• Number of weeks in drought annually, % of population affected • Health-based violations • Number of/type of advisories, #/% of population affected
Built environment	• 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@dhsoha.state.or.us
Link: click here
https://t.e2ma.net/click/yiseei/y2j543j/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/2021/07/02/10113

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/

And more resources…

Wildfire Smoke and Symptoms Affecting Mental Health among Adults in Oregon, Preventive Medicine. Co-authored by Oregon Environmental Public Health Tracking Program with CDC partners. The article describes the effects of exposure to wildfire smoke on mental health based on self-reported symptoms from adults living in Oregon. Findings include an increased prevalence of being unable to stop or control worrying among Oregon adults in areas with medium or heavy smoke for six or more weeks in a year. These findings highlight the mental health burden of Oregon communities experiencing extended periods of wildfire smoke.

Public Health Accountability Metrics
Environmental Health

Sara Beaudrault
Elliott Moon

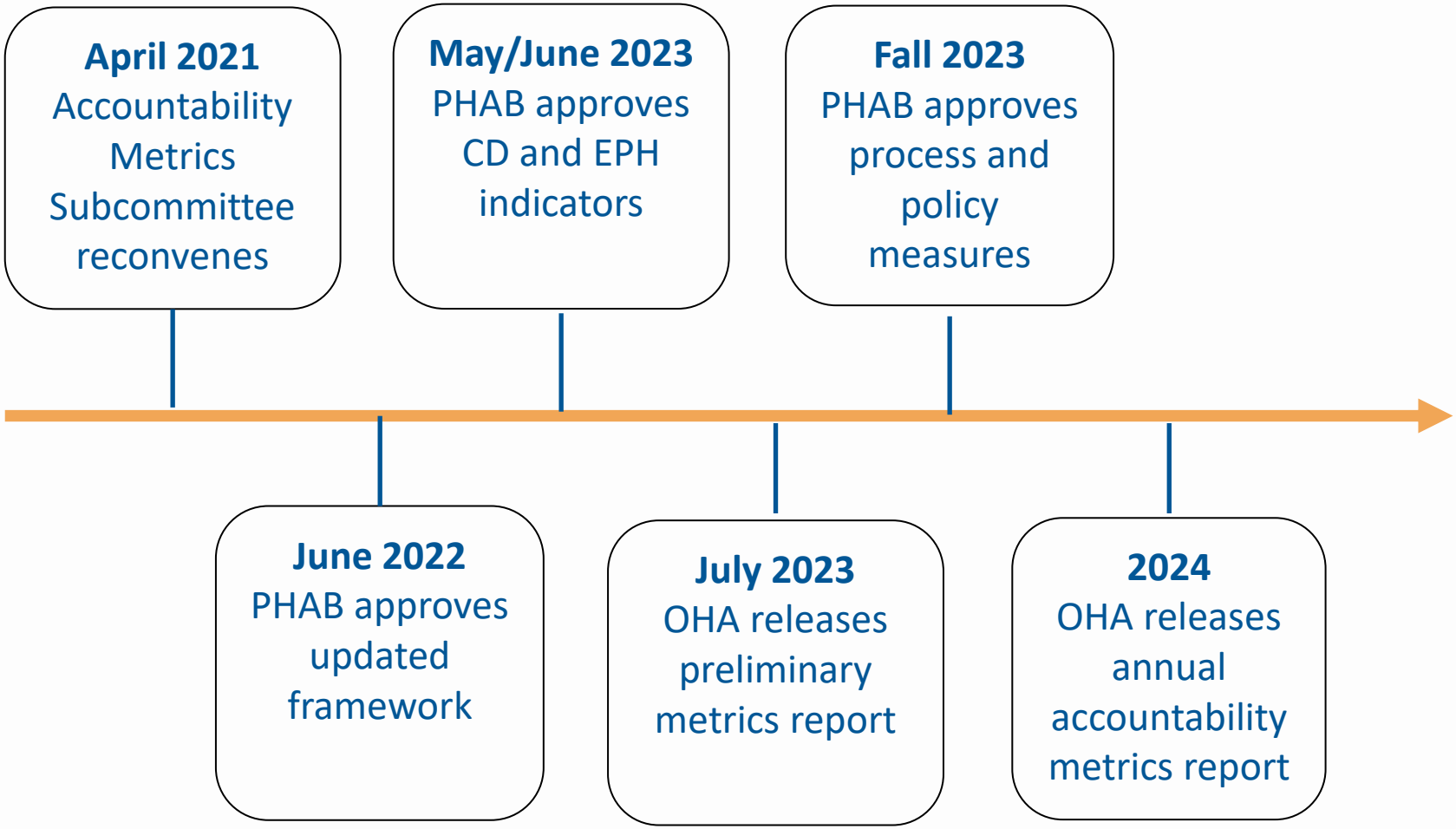
PUBLIC HEALTH DIVISION
Office of the State Public Health Director

What we'll cover

1. Accountability metrics overview
2. Subcommittee recommendations for environmental health priorities and indicators
3. PHAB health equity review questions
4. Action: Adopt environmental health accountability metrics

Public health accountability metrics overview

Timeline


April 2021
Accountability Metrics Subcommittee reconvenes
May/June 2023
PHAB approves CD and EPH indicators
Fall 2023
PHAB approves process and policy measures
June 2022
PHAB approves updated framework
July 2023
OHA releases preliminary metrics report
2024
OHA releases annual accountability metrics report

Public health system metrics

The following set of metrics brings attention to health priorities in Oregon.

These metrics provide a framework to bring together governmental public health authorities, other sectors and partners, and state and local health officials to collectively change policies to create health for everyone.

These metrics also demonstrate improvements in Oregon Health Authority and local public health authorities' core system functions through public health modernization

<table>
<tr><th colspan="2">Collective responsibility across sectors and partners</th><th>Oregon Health Authority and local public health authority accountability</th></tr>
<tr><th>Health priorities</th><th>Policy actions</th><th>Public health data, partnerships and policy</th></tr>
<tr><td>Public health assessment</td><td>Public health policy development</td><td>Public health assurance</td></tr>
<tr><td>Indicators of health outcomes

What are priority health issues throughout Oregon?

Which groups experience disproportionate harm?</td><td>Measures of policy landscape

How are policies contributing to or eliminating root causes of health inequities?</td><td>Measures of foundational capabilities

Are public health authorities increasing capacity and expertise needed to address priority health issues?

Are public health authorities better able to provide core public health functions within their community?</td></tr>
<tr><td colspan="2">Level of accountability

The governmental public health system as a whole, other sectors and partners, elected officials.

Oregon's Public Health Advisory Board has a critical role to influence necessary policy changes.</td><td>Level of accountability

OHA and individual LPHAs</td></tr>
</table>

Recommended environmental health priority areas and indicators

Priority Areas	Indicators
Summer heat-related morbidity and mortality	• Emergency department and urgent care visits due to heat • Hospitalizations due to heat • Heat deaths
Air quality	• Respiratory (non-infectious) emergency department and urgent care visits
Water security	• Number of weeks in drought annually, % of population affected • Health-based violations • Number of/type of advisories, #/% of population affected
Developmental: Mental health effects of climate change	

Other environmental health priority areas and indicators that were discussed

Priority Areas	Indicators
Air quality	• Asthma and allergic disease-related hospital admissions
Built environment	• 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
Water security	• Algal blooms

Environmental health priorities

Subcommittee recommendation on framing environmental health priorities

- Would the subcommittee recommend focusing on separate priority areas as shown on previous slide (i.e. summer-heat, air quality and water security)

- **Or** would the subcommittee recommend combining into a single priority for “Climate Impacts on Health” or “Climate Planning, Preparedness and Community Engagement”?

Public health accountability metrics
Metrics selection criteria summary
June, 2023

		Health equity and an antiracist society Community-leadership and community-led metrics			Data availability			Governmental public health system accountability					Direct connections to state and national initiatives
		Known health inequities exist	Measure is actionable by state and local public health through policy change and community-level interventions	Communities have provided input and demonstrated support	Data are reportable at the county level or similar geographic breakdowns	Data are routinely updated	Data are reportable by race, ethnicity, gender, sexual orientation, age, disability, income level, insurance status or other relevant risk factor data	State and local public health authorities have control over the measure, which includes influence	Funding is available or is likely to be available	Local and state public health expertise exists	Changes in public health performance will be visible in the measure	Measure is sensitive enough to capture improved performance or show differences between years	State and community health improvement plans CCO incentive measures Healthy People 2030
Summer heat-related morbidity and mortality	Emergency department and urgent care visits due to heat Hospitalizations due to heat Heat deaths	Yes	Yes	Yes	Yes	Yes	Yes, likely to require aggregation	Yes	Public health modernization funding	Developing All LPHAs currently developing, updating or implementing a Climate and Health plan	Unsure	Unsure	1115 Medicaid Waiver 2021 Oregon Climate Change Adaptation Framework OHA Climate and Health in Oregon report
Air quality	Respiratory (non-infectious) emergency department and urgent care visits Adult influenza vaccination rate	Yes	Yes	Yes	Yes	Yes	Yes, likely to require aggregation	Yes	Public health modernization funding	Developing All LPHAs currently developing, updating or implementing a Climate and Health plan	Unsure	Unsure	1115 Medicaid Waiver Healthy People 2030 objective EH-01 2021 Oregon Climate Change Adaptation Framework OHA Climate and Health in Oregon report
Water security	# weeks in drought annually, % population affected Health-based violations, % population affected # and type of advisories, % population affected	Yes	Unsure	Yes	Yes, % population affected not currently reported but could be calculated and made available	Yes	Not currently	Yes	OHA Drinking Water Services funding Public health modernization funding	Developing All LPHAs currently developing, updating or implementing a Climate and Health plan	Unsure	Unsure	Healthy People 2030 objective EH-03 2021 Oregon Climate Change Adaptation Framework OHA Climate and Health in Oregon report

Summer heat-related morbidity and mortality

Issue summary:

Why is this a priority now, and which groups are experiencing disproportionate harm?

- Exposure to higher temperatures and extreme heat is on the rise because of the frequency, length and intensity of heat events.
- In Oregon there were a total of 157 heat-related deaths in 2021 and 2022 combined, compared with 1 to 4 heat-related deaths per year in the previous decade.
- Environmental threats like extreme heat disproportionately impact communities of color, tribal communities and communities that are lower-income.
- Racist housing policies relegated these communities to areas with increased heat exposure and less access to protections.
- Systemic educational disinvestment and lack of oversight results in overrepresentation and lack of protections in jobs with greater exposure to environmental hazards.

Recommendations

If summer heat-related morbidity and mortality is selected as a priority area, OHA recommends all of the following indicators:

- Emergency department and urgent care visits due to heat
- Hospitalizations due to heat
- Heat deaths

Rationale

- Rationale:
  - The three indicators align with well-established national measures
  - OHA and some LPHAs regularly access and use these measures
  - The three indicators together provide a more comprehensive understanding of which groups are most affected during summer heat events and areas for intervention.
  - Opportunity for alignment with 1115 Medicaid waiver
  - Opportunity to align local, regional and statewide work with other efforts to address social determinants of health
  - Opportunity for local and regional interventions with health system partners and community-based partners

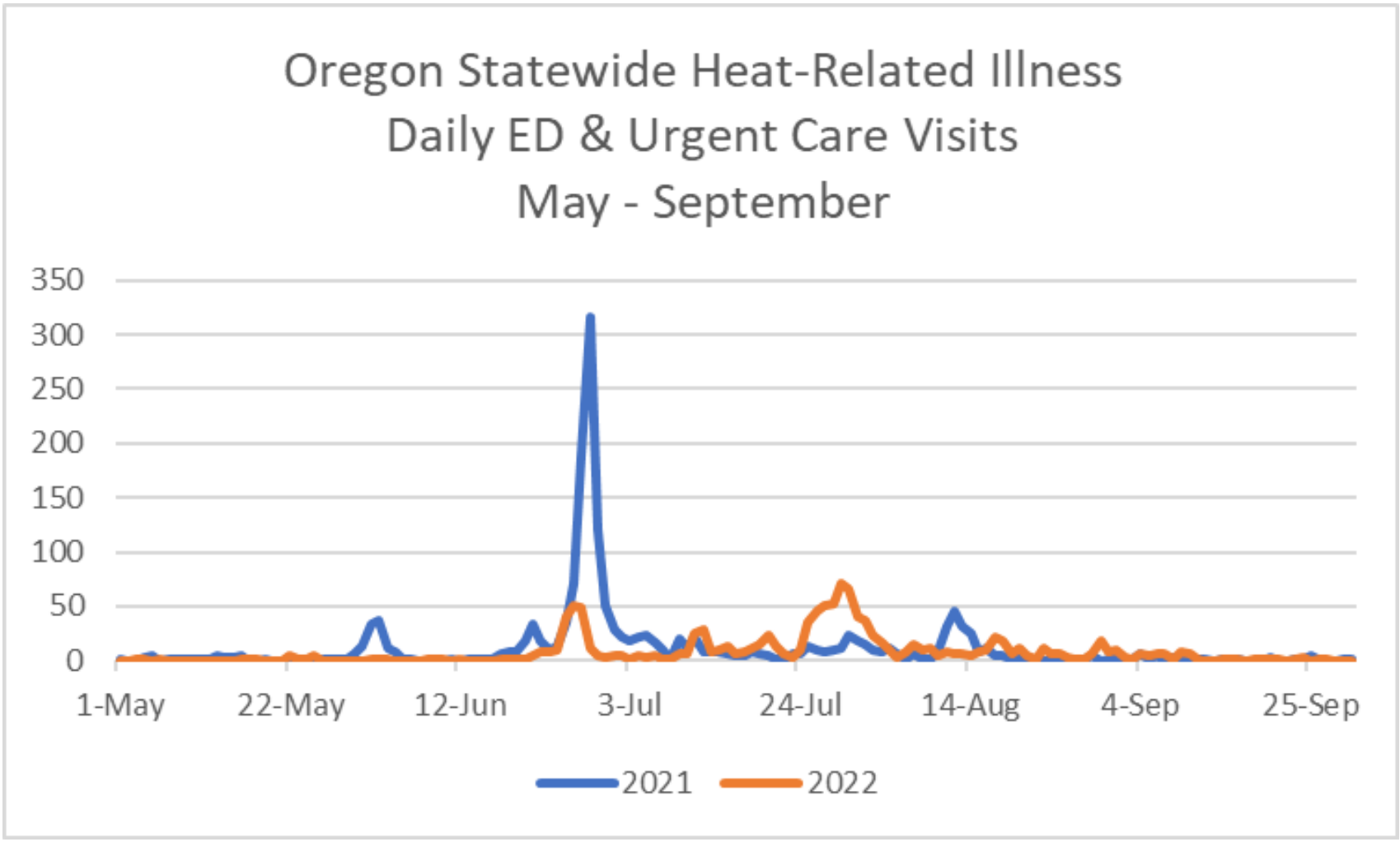
Summer heat is a community priority

- CBOs and interested community members identified extreme heat as one of their top concerns in a community-based survey conducted as part of the annual Climate and Health Report (before the 2021 Heat Dome Event).
- Extreme heat also emerged as a top concern in the qualitative findings of the survey, especially for respondents who identified as people of color
- OHA is currently funding 37 CBOs that are engaged in Climate Resilience.
- Recent Legislative investments in household cooling and air filtration interventions

Data for indicators

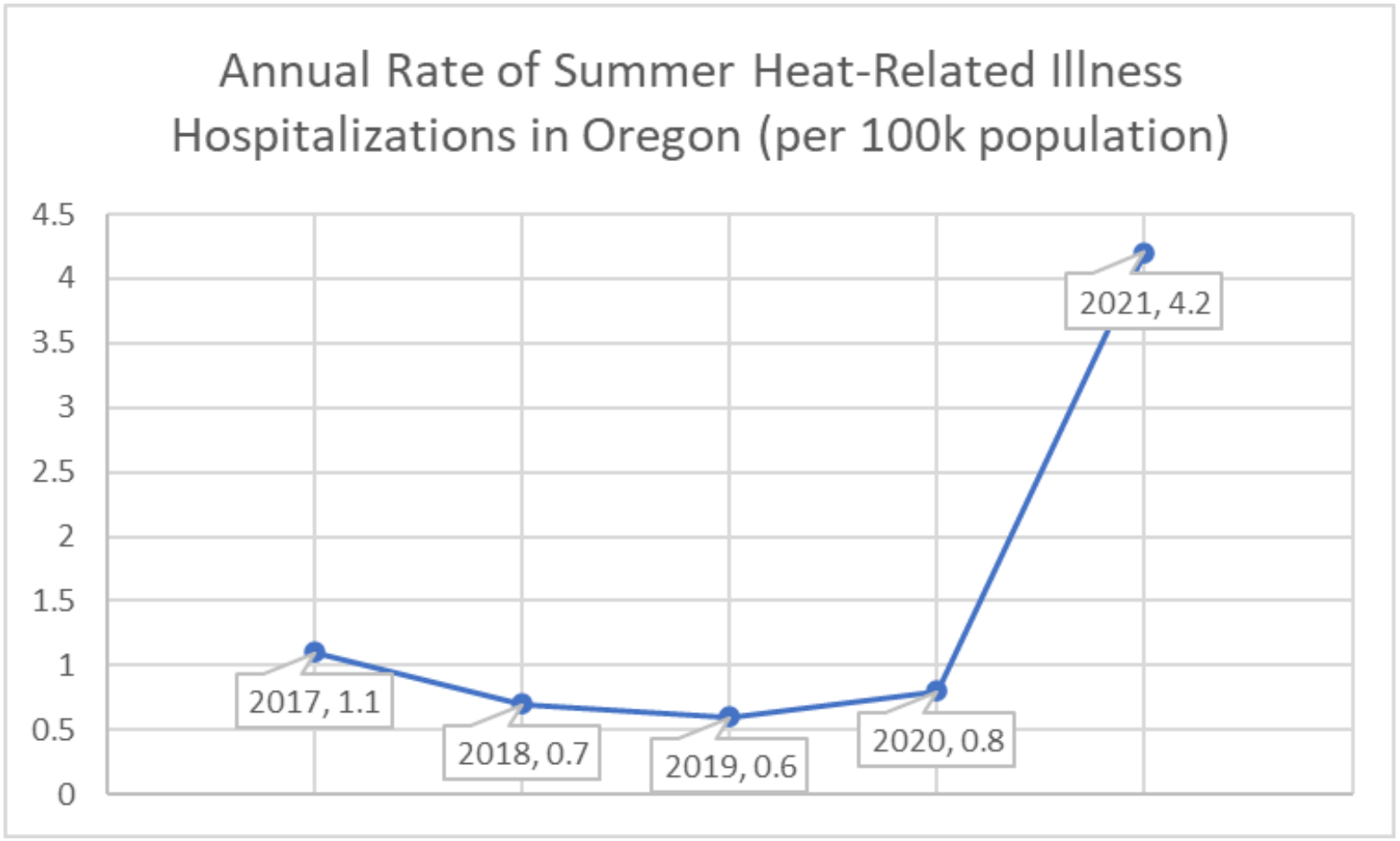
Proposed indicators	Data source	Other Oregon plans that use these measures	Populations that experience a disproportionate burden of illness, death or risks	Data are reportable at a county level or other geographic breakdowns	Data can be stratified*
Summer heat-related morbidity and mortality					
Emergency department visits due to heat	OHA electronic surveillance system, ESSENCE. Also includes urgent care	Portland Regional Climate and Health Monitoring Report	Incomplete race and ethnicity data	LPHA can acquire access and state level dashboards are set up in Summer Hazards.	REALD is not available. Data for race, gender, age, occupation, and chronic disease are available.
Hospitalizations due to heat	Oregon inpatient hospital discharge data from Healthcare Cost and Utilization Project (HCUP).	Portland Regional Climate and Health Monitoring Report, Oregon Environmental Public Health Tracking Program	Inequities by housing status, occupation, race, sex, and age have been identified in existing studies.	Will require OHA and LPHA partnership to ensure LPHAs have access	Same as above. Aggregation by larger regions or multiple years may be necessary.
Heat deaths	Oregon Vital Records, OHA Oregon death certificates.	Portland Regional Climate and Health Monitoring Report	SES, housing status, age	Oregon vital statistics data has an approximate 1 year lag. Large population counties have access to Vital Records, however many counties in Oregon do not. Small numbers may require aggregation across larger regions or years.	Same as above

Extreme Heat



Data from Oregon ESSENCE syndromic surveillance program.

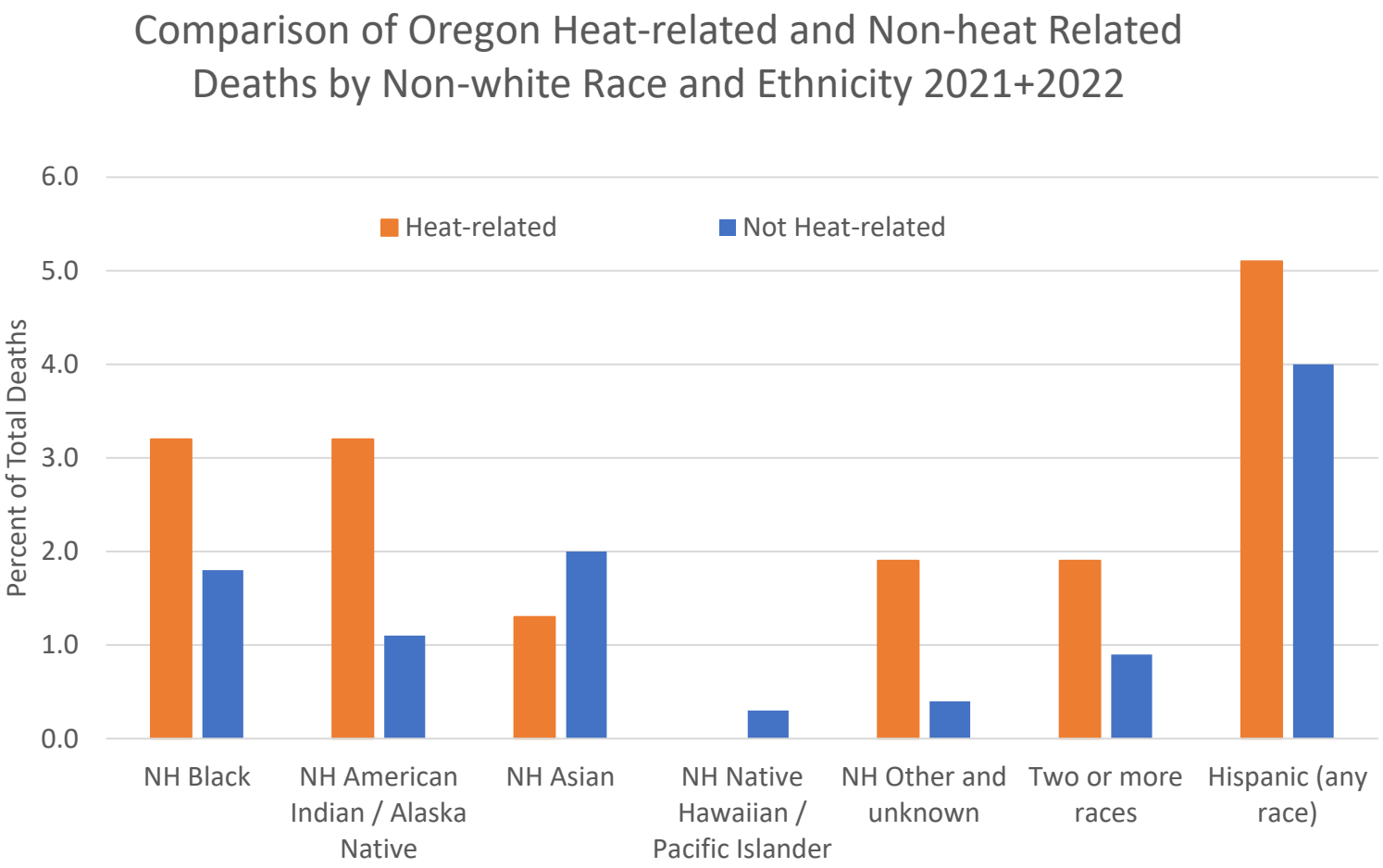
Extreme Heat



Date source: Centers for Disease Control and Prevention. National Environmental Public Health Tracking Network. Web. Accessed: 3/27/23. www.cdc.gov/ephtracking

Oregon Health Authority

Extreme Heat



*Data from 2022 are preliminary and subject to change.
Source: OHA - Public Health Division - Center for Health Statistics, Produced on March 2, 2023

Air quality-related morbidity

Issue summary: Air Quality

Why is this a priority now, and which groups are experiencing disproportionate harm?

- Wildfires are the primary contributor to summer air pollution across Oregon
- The frequency and intensity of wildfires in Oregon and many western US states have been increasing
- Many areas in Oregon experience cumulative wildfire smoke impacts and are exposed to hazardous air pollution year after year
- Disproportionate wildfire smoke impacts measured by respiratory ED & Urgent Care visits in Oregon have been experienced by persons of color and Hispanic populations

Who is most likely to have health effects from wildfire smoke exposure?

Sensitive groups:

- Persons with chronic respiratory, cardiovascular and other chronic conditions
- Persons >64 years of age
- Infants and children
- Pregnant people (& fetus)
- People who smoke tobacco

Vulnerable groups:

- People working outdoors, e.g., migrant and seasonal agricultural workers
- Persons exercising or working at a level that increases breathing rate
- Persons experiencing houselessness
- Persons living in poverty or with low incomes

Recommendations

If air quality-related morbidity is selected as a priority area, OHA recommends the following indicator:

- Respiratory (non-infectious) emergency department and urgent care visits

Rationale

- This indicator aligns with a well-established national measure
- OHA and some LPHAs regularly access, use and report on this measure
- Recognition that adopting air quality as an accountability metric may bring needed attention and resources to this issue (for example, expanded number of air monitoring stations)
- Opportunity to bring attention to other issues that affect air quality
- Opportunity to align with efforts to implement the 1115 Medicaid waiver

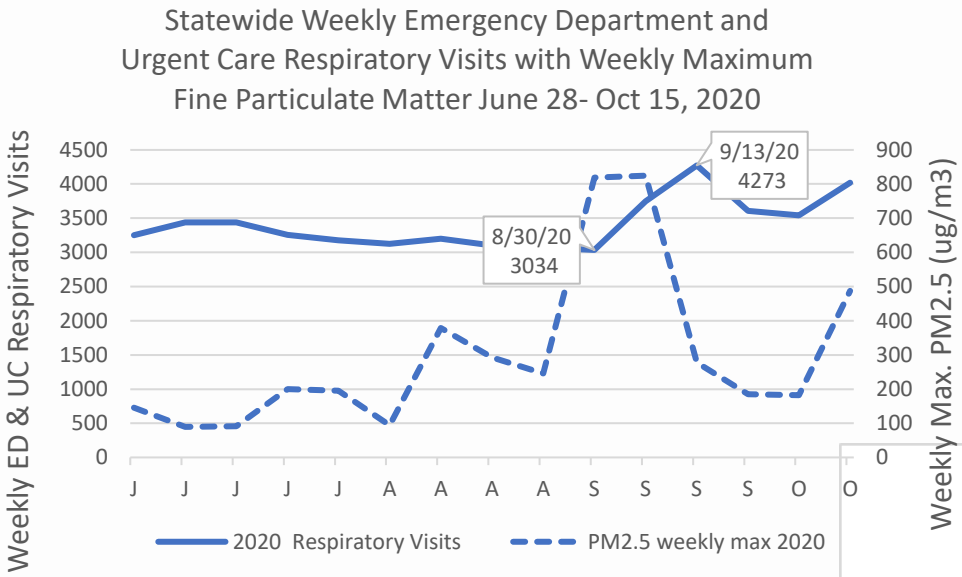
Air quality is a community priority

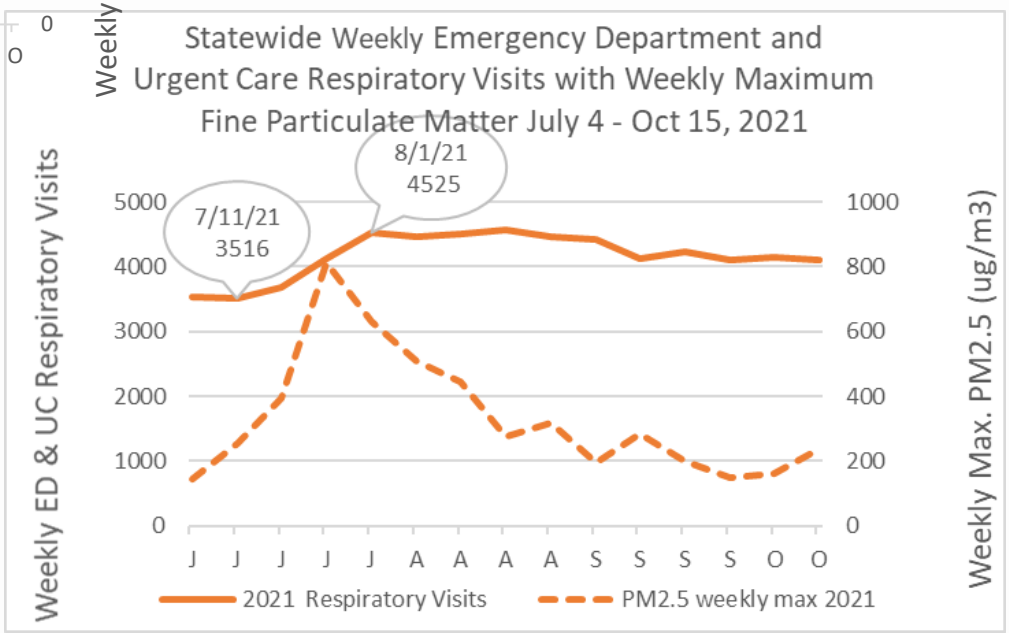
- CBOs and interested community members identified air quality and wildfires as one of their top concerns in community-based survey conducted as part of 2020 Climate and Health Report.
- Air quality also emerged as a top concern in the qualitative findings of the survey, especially for respondents who identified as people of color
- OHA is currently funding 37 CBOs that are engaged in Climate Resilience adaptation actions.
- Recent Legislative investments in household air purifiers (SB 762 and 1115 Medicaid waiver)

Data for indicators

Proposed indicators	Data source	Other Oregon plans that use these measures	Populations that experience a disproportionate burden of illness, death or risks	Data are reportable at a county level or other geographic breakdowns	Data can be stratified*
Air quality-related morbidity					
Respiratory (non-infectious) emergency department and urgent care visits	OHA electronic surveillance system, Oregon ESSENCE. Also includes urgent care	Portland Regional Climate and Health Monitoring Report (uses Asthma & Allergic Disease)	Inequities by housing status, occupation, race/ethnicity, sex, and/or age have been identified.	LPHA can acquire access and state level dashboards are set up in Summer Hazards.	Reportability depends on numbers. Aggregation by larger regions or multiple years may be necessary.
Asthma and allergic disease related hospital admissions	Oregon inpatient hospital discharge data	Portland Regional Climate and Health Monitoring Report	Same as above	Same as above	Same as above

Oregon statewide wildfire smoke health impacts, 2020-21





Water security

Issue summary:

Why is this a priority now, and which groups are experiencing disproportionate harm?

Equitable access to adequate supplies of clean, safe and affordable water for drinking, food preparation, sanitation and hygiene, and cultural and spiritual uses is essential to human health and wellness.

Oregon's changing climate, aging water infrastructure, socioeconomic conditions and community design have a negative impact on access to safe, and affordable water.

Populations experiencing houselessness, lower income and rural communities, communities of color, Tribal communities, migrant communities and communities served by private wells, private surface water intakes or very small water systems are more likely to experience threats to water access and quality.

Recommendations

If water security is selected as a priority area, OHA does not have a recommendation for which indicators should be selected, though we do recommend including the **percent of population affected** if any of the following indicators are selected:

- Number of weeks in drought annually
- Health-based violations
- Number of/type of public water system advisories

Rationale

- While proposed indicators focus on public water systems, this may bring attention and opportunities to focus on drinking water safety and access more broadly (to also include domestic wells and water infrastructure in rural communities).
- Water quality and water security issues likely to increase as temperatures increase ad drought worsens
- Aligns with Healthy People 2030 objective: Increase the proportion of persons served by community water systems who receive a supply of drinking water that meets the regulations of the Safe Drinking Water Act.

Water security is a community priority

- Oregon Water Futures facilitated conversations with communities impacted by water issues and lifted up culturally-specific ways of interacting with drinking water and bodies of water; concerns around water quality and cost; resiliency in the face of challenges to access water resources essential for physical, emotional, and spiritual health; and a desire for water resource education and to be better equipped to advocate for water resources.
- CBOs and interested community members identified water security as one of their top concerns in community-based survey conducted as part of 2020 Climate and Health Report,
- Water security also emerged as a top concern in the qualitative findings of the survey, especially for respondents who identified as people of color

Data for indicators

Proposed indicators	Data source	Other Oregon plans that use these measures	Populations that experience a disproportionate burden of illness, death or risks	Data are reportable at a county level or other geographic breakdowns	Data can be stratified*
Water security					
# weeks in drought annually, % of population affected	NIDIS https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR ; see https://droughtmonitor.unl.edu/Data.aspx for data overview Drought affected counties/water systems under stress from drought, including domestic wells (OHA Drinking Water Services and Environmental Public Health data)	OHA Climate & Health Report, OHA Environmental Public Health Water Insecurity Project	Rural residents, domestic well users, farmers	County, State, Region, with statistics available by area, percent area	% of population affected is available on data source. Data can be paired with demographic and socioeconomic data from the American Community Survey
Health-based violations	SDWIS database- health-based violations include Maximum Contaminant Level (MCL) and treatment technique violations. Could also include action level exceedances.		Rural residents, domestic well users, farmers, pregnant people, infants & children, older adults, immunocompromised & other pre-exisiting medical conditions.	% of population affected by at least 1 health-based violation per year- can aggregrate at county level	No, but aggregrated county data could be paired with ACS data. Population-level data (cumulative population percent, cumulative population)
# of & type of advisories/# population affected would inform vulnerability to water outages	DWS in-house database tracks drinking water advisories. Could limit to particular advisory types (do not drink, boil, etc.)	Drinking water services, OHA Environmental Public Health Tracking Program (Community Water Systems dashboard under development)	Age (infants and children, older adults), pregnancy, health status (immunocompromised)	Every public water system is associated with a county. data are reported by public water system.	Vulnerable populations are listed based on system affected; also aggregated county data could be paired with ACS data.

February 21, 2023

(Released Thursday, Feb. 23, 2023)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.93	92.07	77.18	38.84	14.48	1.40
Last Week *02-14-2023*	12.81	87.19	70.46	38.84	14.48	1.40
3 Months Ago *11-22-2022*	5.37	94.63	59.79	46.04	26.18	1.40
Start of Calendar Year *01-03-2023*	13.46	86.54	59.75	46.03	26.18	1.40
Start of Water Year *09-27-2022*	0.42	99.58	68.05	52.42	30.73	1.40
One Year Ago *02-22-2022*	4.18	95.82	90.65	76.38	45.61	16.22

Intensity:

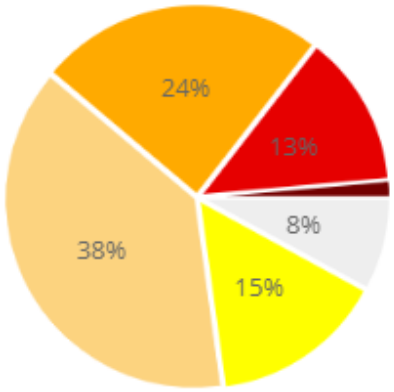
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

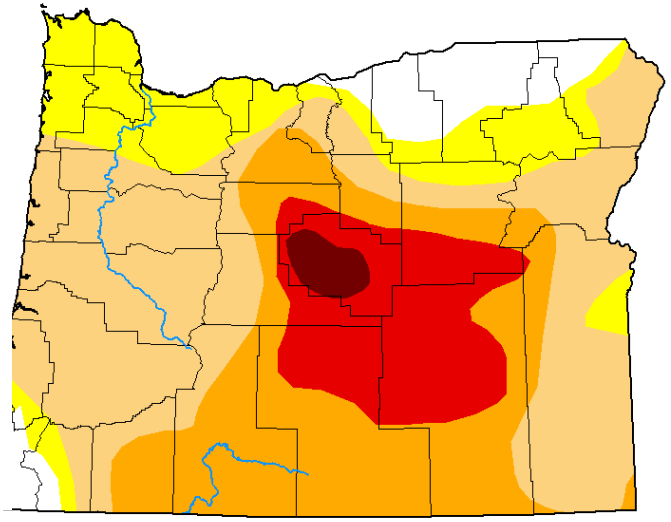
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

U.S. Drought Monitor

Oregon

OR % Area in Drought Categories





Author:
Richard Heim
NCEI/NOAA

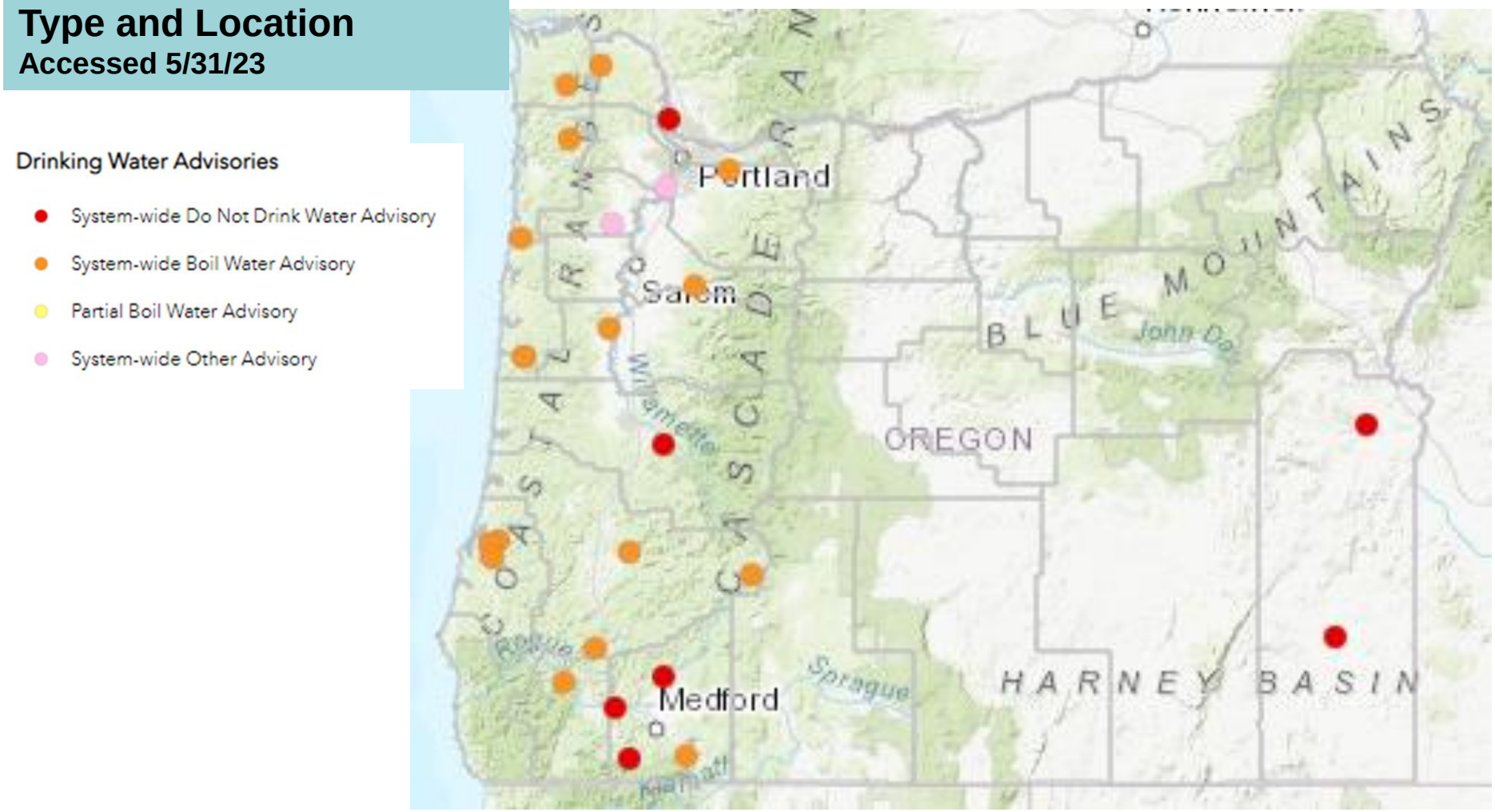
droughtmonitor.unl.edu

https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR

Oregon Health Authority

Oregon Drinking Water Current Advisories by Type and Location

Accessed 5/31/23



Source: https://yourwater.oregon.gov/advisories.php

Oregon Health Authority

Drinking Water

Health Outcome Measure

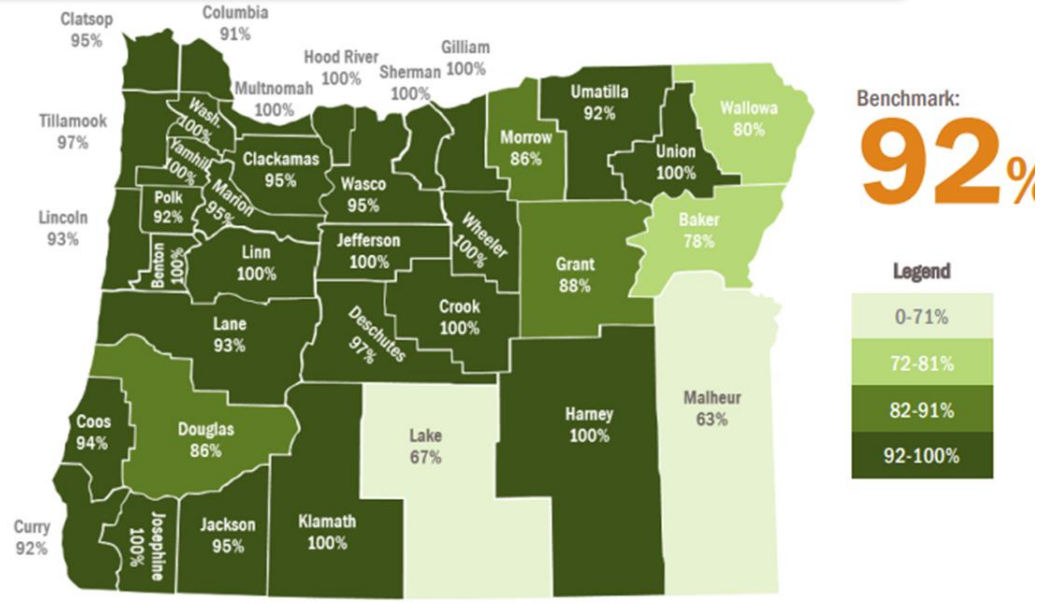
Percent of community water systems meeting health-based standards

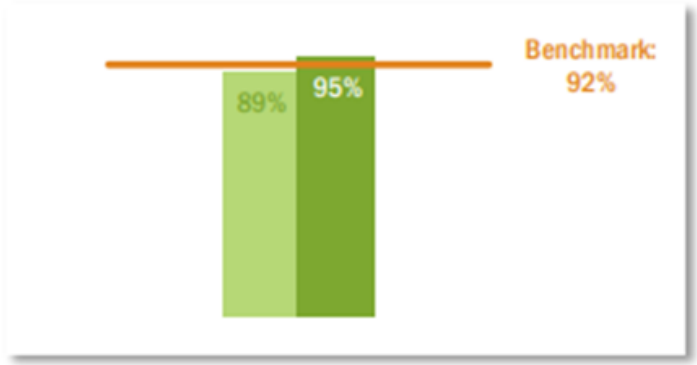
2023 Recommendation:
include county level % of population served affected by health-based violations and action level exceedances *(note: population served counts are not unique due to transient systems (e.g., schools))*

Foundational program area: Environmental Health

Data source: Safe Drinking Water Information System (SDWIS) Federal Reporting Services, the Environmental Protection Agency's (EPA) national regulatory compliance database

Benchmark source: 92%, EPA





Notes:
- Unit of analysis is water systems; race/ethnicity data do not apply.
- Percentages are calculated by dividing the number of community water systems that met standards (numerator) by the number of community water systems (denominator). Numerator and denominator data are provided in the Technical Appendix.

Oregon Health Authority

Developmental: mental health effects of climate change

Issue summary:

Why is this a priority now, and which groups are experiencing disproportionate harm?

The mental health effects of climate change include those directly related to the physical and traumatic consequences of severe weather events, as well as anxiety, fear and distress associated with slower-moving stressors, perceptions and attempts to understand and respond appropriately to climate change and its implications.

The effects of climate change on mental health and well-being are not isolated but interact with other social and environmental determinants of health, including race and income.

Livelihoods and cultural identities are negatively affected by Oregon's changing landscapes and will disproportionately affect farmworkers, fishers, tribal and indigenous people. Youth with depression and anxiety are at increased risk for worsening symptoms.

Recommendations

- Continue to explore opportunities to develop metrics for mental health effects of climate change for youth and other groups.

PHAB health equity review questions

What health inequities exist among which groups? Which health inequities does the work product, report or deliverable aim to eliminate?

PHAB's updated framework for public health accountability metrics is intended to bring sectors together to eliminate root causes of health inequities, including through policy actions.

Inequities are present for all recommended indicators. Environmental threats disproportionately affect communities of color, Tribal communities, migrant communities and often rural communities. Causes of inequities include housing status and quality, outdoor worker status and barriers to accessing resources.

PHAB health equity review questions

How does the work product, report or deliverable engage other sectors for solutions outside of the health care system, such as in the transportation or housing sectors?

Accountability metrics can be used to foster shared responsibility and action across sectors. These metrics can also be used to strengthen public health and health care partnerships and alignment.

PHAB health equity review questions

How was the community engaged in the work product, report or deliverable policy or decision? How does the work product, report or deliverable impact the community?

The PHAB Accountability Metrics subcommittee has not directly engaged communities in the selection of priority areas or indicators for accountability metrics. The PHAB Accountability Metrics workgroup has looked to previous engagement and existing plans to understand community priorities for all recommended environmental health indicator.

PHAB vote

- Do members approve adopting the recommended environmental health priority areas and indicators for 2023-25?