Climate and Health in Oregon: Summary

Since releasing the Oregon Climate and Health Profile Report in 2014, Oregon:

• Had it’s 3 hottest years on record (2015, 2016, and 2017)
• Saw the lowest snowpack on record (2015)
• Had some of the most severe fire seasons in modern history (2015, 2017)
• Declared drought emergencies in 24 counties (2015)
• Was declared a major national disaster area for damage caused by extreme storms, floods and landslides (2016)

These changes in our climate threaten our access to:

clean air,

• Air pollution from increased ground-level ozone and wildfire smoke will worsen respiratory and cardiovascular illnesses.
• Increased CO\textsubscript{2} concentrations and higher temperatures will prolong allergy seasons, complicating respiratory conditions.
• Wildfire smoke and drought are a problem in many Oregon communities, threatening family incomes and quality of life.

clean water,

• Water quality is compromised by both drought and increased water temperatures, leading to conditions that give rise to harmful algal blooms and waterborne diseases.
• Drinking water sources can become contaminated from flooding.
• Drought conditions affect agricultural production which could lead to an increased use of chemicals, threatening Oregon waterways.

and healthy food.

• Drought conditions in Oregon and elsewhere, could increase the cost of food resulting in food insecurity, especially among vulnerable populations.
• Certain food crops will decrease in nutritional value (zinc, iron and protein content) due to the increase in CO\textsubscript{2} concentrations, potentially exacerbating malnutrition.
• American Indians risk further loss of First Foods, including the loss of native roots, berries, fish and game.

We are in this together...

... yet some of us are better positioned to weather the storm.

• Communities of color and low-income households already bear a disproportionate burden of disease and have less access to opportunities and resources to cope with emerging challenges.
• Children will likely experience more cumulative health effects as more extreme weather events and climate-related disruptions continue to unfold over the next decades.
Oregon is not yet ready…

… for the environmental health challenges that lie ahead.

- A recent assessment of Oregon’s public health system found we are not currently equipped to handle the complex and emerging environmental risks that climate change will exacerbate in Oregon.
- 98% of health departments report having only partial to minimal ability to identify and prevent environmental health hazards.

But we now have a plan.

It starts with building workforce capacity to promote long-term changes in:

- Actively engaging with our diverse community partners and elevating the voices of our most vulnerable populations to inform policy priorities.
- Informing policies that affect air quality and reduce air pollution.
- Promoting policies that strengthen our local food systems.

- Conducting regular monitoring of climate and health indicators, and monitoring the progress made on our resilience strategies.
- Equipping our health care partners with the information they need to protect patients from climate-related health risks.
- Supporting community-driven climate adaptations that contribute to building an evidence base for effective climate and health interventions.

- Promoting community improvements that encourage walking, biking and the use of public transit.
- Helping to ensure access to safe places for communities to gather, build community and take refuge.
- Prioritizing public health interventions that address the root causes of health inequities and preventable diseases in Oregon.

And we’re making progress.

Together, with our state and local public health partners, we are modernizing our public health system.

- Health interventions to address climate change are now integrated into several state and local plans (strategic plans, hazard mitigation plans, etc.)
- Public health practitioners are convening cross-sector partners to integrate health equity considerations into climate change planning and policy.
- Partners now have more science-based decision-support tools to take actions that protect public health from climate risks.
WHY less hazard-specific work and more “All-Hazards”/Resilience work?

1. **ADAPTABILITY:** Climate change is complex and creates greater uncertainties (what we have experienced in the past does not necessarily hold true for the future). Because of increasing variability and the emergence of new threats, we need to invest in organizational resilience so that our public health system is ready to adapt to new challenges and conditions.

2. **INTEGRATION:** Preparedness programs are already doing a lot of the hazard-specific work... how does our program add value to these existing efforts? By working across the public health system, increasing climate literacy and integration of more climate considerations into all public health program areas. We also identify and lead on cross-cutting issues that don’t already have a home within the public health system.

3. **RESPONSIVENESS:** Our emphasis on “all hazard” strategies, is also in direct response to the rigorous input provided by a diverse set of community partners who encouraged us to prioritize systems-level strategies that build resilience to multiple climate hazards. To that end, we are prioritizing longer-term adaptations (in our policies, systems, and environments) that protect public health from future climate stressors.

4. **LISTENING TO LOCALS:** Oregon has diverse climate regions. For instance, our coastal communities have different climate priorities compared to those in the high desert. Simply put, our local partners are better suited to prioritize hazard-specific interventions. At the State level, we can provide the technical assistance and decision-support tools that local partners need to address the climate priorities in their communities. For example, the Oregon Climate and Health Collaborative resulted in measurable collective impact and involved work that addressed climate impacts ranging from drought, wildfire, air quality, flooding, storms, and heat (more info below).
A deeper look at our work with local partners:

**BACKGROUND:**
The Oregon Climate and Health Collaborative (OCHC) is comprised of 5 local health jurisdictions supported and coordinated by the PHD Climate and Health Program: Benton County Health Department, Crook County Health Department, Jackson County Health Department, Multnomah County Health Department, and North Central Health District.

In late 2016, the OCHC members received a $28,000 1-year grant to implement interventions prioritized in their respective Climate and Health Adaptation Plans (these existing plans were made possible by a previous grant with our program, via 2010-13 CDC funding).

**LOCAL SUCCESS STORIES:**

“We were able to implement a program that paid for nearly 50 well water quality tests for bacteria and nitrates. We mapped the results to help inform future public health interventions. With support and technical expertise from the Climate and Health Program at the Oregon Health Authority, we were able to develop and disseminate new educational materials on drought health risks in both English and Spanish to program participants. Having the autonomy to design our interventions as we saw fit and the monthly check-in calls with the State enabled our success...As a small, rural county health department, NCPHD is not able to dedicate any other funding specifically to doing climate and health work, so I’m worried that the momentum we have created in the region will slow down as the grant funding period ends. However, I will continue to try to insert public health into local climate-related work whenever possible.”

— Jeremy Hawkins, North Central Health District

“We received overwhelming positive feedback from the community residents regarding the new Workshop Series we piloted. We were able to provide community members with valuable information on the relationship between climate and health.”

— Holly Wenzel, Crook County Health Dept.

“I appreciated the trainings we received along with the State’s support with developing and evaluating our work. Through this grant we were able to develop new partnerships and relationships between County departments and ultimately, our County Commissioners adopted a new resolution to further support climate adaptation work in Benton County.”

— Mac Gillespie, Benton County Health Dept.

“We successfully developed guidance for large sporting events held on hot days and distributed it to key events, reaching thousands of participants. Our work measuring social vulnerability informed statewide efforts to integrate environmental justice into climate policy and we developed familiarity with tools for explaining co-benefits of climate change.”

— Brendon Haggerty, Multnomah County Health Department

“The support from OHA was outstanding. Our greatest success this year was being part of the City of Medford’s natural hazard mitigation planning process and contributing to the inclusion of climate and health aspects.”

— Tanya Phillips, Jackson County Health Department
IN ONE YEAR IMPLEMENTING INTERVENTIONS, THE OCHC MEMBERS MADE:

8 CHANGES IN POLICIES, including:

- The integration of climate change into health department strategic plans (Crook, Benton)
- The integration of climate adaptation strategies into emergency preparedness plans and natural hazard mitigation plans (Jackson, Multnomah)
- A new proclamation by county commissioners to address climate change (Benton)
- Climate and health focused testimony on state legislation on carbon pricing and transportation (Mult.)
- Public health representation on regional air quality committees (Crook, Jackson)
- The integration of climate and health equity concepts into a county’s comprehensive plan (Benton)
- Provided climate and health data to inform city and county resolutions to move to 100% renewable energy by 2050. (Multnomah)

11 CHANGES IN SYSTEMS, including:

- A new system for sharing water contamination results with water resource planners (NCHD)
- The development of a new cross-sector climate change planning group (Benton)
- The development of new climate and health decision-support tools (Multnomah, NCHD)
- The development of new extreme heat guidance for large organized athletic events (Multnomah)
- An updated severe weather operating protocol (NCHD, Jackson)
- An updated protocol for considering climate factors in unusual communicable disease reports (NCHD)
- Integrating more climate considerations into syndromic surveillance activities (NCHD, Multnomah)
- Integration of climate considerations into healthy homes programs (Crook)
- New air quality information was integrated into WIC and Home visiting programs (Crook, Multnomah)

10 CHANGES IN WORKPLACE CULTURE, including:

- A new protocol for providing updates during all-staff meetings on climate news and information
- New internal partners within health departments were engaged in climate projects, including helping to recruit intervention participants and with the dissemination of risk communications.
- Climate and Health Adaptation Plans are now regularly referenced and advanced by various public health programs
- Climate change has become a new focus of a public health promotion team
- Stronger linkages made between environmental health, health equity and climate justice
- Ongoing participation in the NW Climate and Health Network
- An intern was hired to engage on climate and health issues within the health department
- Identification of climate champions within partner departments

PROGRESS ON COMMUNICATIONS, Including:

- Hosted community workshops
- Sent mass e-mail messages
- Produced social media posts
- Sent out press releases
- Utilized citizen alert warning system
- Work featured in local radio and newspaper stories
- Convened partners for presentations and events
- Published online information, including updated maps of vulnerability
- Had more public health representation at external meetings