

Climate and Health in Oregon

2020 Report

Executive summary

Rapidly accelerating climate change is intensifying public health crises in Oregon.

In the last five years, Oregon:

- Recorded its hottest years in state history (2015, 2016, 2018 and 2020 are all in the top 10 hottest years) and had the lowest snowpack ever on record (2015)
- Had the most severe wildfire seasons in modern history, with the 2020 wildfires burning more than 1 million acres and destroying or severely damaging more than 4,000 homes. By comparison, Oregon's next worst fire year, 2015, saw only 56 residences lost to conflagration fires.
- Had a major municipal drinking water system contaminated with cyanotoxins (2018)
- Was declared a national disaster area for damage caused by extreme storms, floods and landslides (2016, 2017, 2019, 2020)
- Had declarations of drought emergencies in 25 of 36 counties in the state in 2015 (11 counties declared drought emergencies in 2018 and 15 counties in 2020).

We are feeling the effects of these disasters and we know it's only going to get worse.

- More frequent wildfires are expected to increase respiratory illnesses, heart disease and other poor health outcomes in the decades to come.
- Increases in average and extreme temperatures are projected to increase the number of heat-related hospitalizations and deaths.
- Future storms are projected to cause more extreme flooding events.
- Displacement and income loss associated with these climate impacts will increase the risk of homelessness, food insecurity and mental health effects.

Climate change affects communities differently and requires us to acknowledge and address racial and economic inequities in Oregon.

- Communities of color and tribal communities are already disproportionately affected by social, economic and environmental impacts created by current and historical systems of oppression.
- Climate change adds additional layers of cumulative impacts, exacerbating existing disparities between white and non-white Oregonians.
- Lower-income people have fewer options for adapting to new challenges and are often forced to work and live on the frontlines with less financial stability and fewer alternatives.

The current global pandemic further exposes these inequities and makes addressing the climate crises even more challenging.

- Populations most exposed and vulnerable to COVID-19 overlap with populations most exposed and vulnerable to extreme heat, air pollution and other climate hazards.

People working on the frontlines, including in smoke and extreme heat, are at increased risk of illness and death.

- Rural communities are often more exposed to climate impacts and have less access to resources and opportunities to cope and adapt.
- Farmworkers are particularly vulnerable. Latinx immigrants make up a large majority of farmworkers in Oregon.
- Migrant farmworkers experience disproportionate rates of occupational injuries and illness because of social factors including racism, lack of housing and language barriers.
- Governor Kate Brown's Executive Order (EO) 20-04 directed OHA and Oregon Occupational Safety and Health (OR-OSHA) to develop a proposal for worker protection standards for heat and wildfire smoke in 2021.

Climate change not only affects physical health, but also mental health.

- Mental health effects include those directly related to traumatic natural disasters such as the recent wildfire events, as well as anxiety, fear and distress associated with slower-moving stressors and the uncertainty of future climate impacts.
- These effects are not isolated but interact with other social and environmental determinants of health, including race, income and housing stability.
- Youth with depression and anxiety are at increased risk for worsening symptoms.
- Governor Brown's Executive Order (EO) 20-04 directed OHA to produce a study on youth depression and mental health effects of climate change in Oregon.

Social resilience is a key consideration for adapting to these new realities.

- Social cohesion and social networks act as buffers against negative health impacts of climate disasters and help communities recover more quickly.

We can build climate resilience through public health action.

This includes:

- Promoting climate mitigation that maximizes health co-benefits
- Collaborating across all levels of local, state and tribal government and with community partners to advance equitable climate adaptation
- Building environmental health capacity to identify and address emerging environmental health threats, including threats to workers
- Increasing understanding of mental health effects on individuals and the role of social resilience in fostering community resilience
- Supporting climate-related strategies in OHA's State Health Improvement Plan, *Healthier Together Oregon*.



PUBLIC HEALTH DIVISION
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