Executive summary

This report identifies ways in which the public health system is adapting to the increasing number and severity of wildfires in Oregon and highlights opportunities for future climate adaptation. The information in this report is based mainly on interviews that took place in 2018 with key informants who work in Oregon's public health system at the state and local levels. References can be found in the full report and upon request.

Wildfires in Oregon

Wildfires are a part of a natural seasonal cycle and have always been part of Oregon's landscape. The lengthening of the fire season is largely due to declining mountain snowpack and earlier spring snowmelt. Increased wildfire activity in the Pacific Northwest is partially attributed to human-caused climate change.

Public health risks

- Increased risk of cardiovascular and respiratory diseases.
- Increased risk of cancer with repeated chronic exposure.
- Irritation of eyes, nose, and throat.
- Decreased visibility, increased risk of vehicle accidents.
- Increased risk of mental health effects.
- Susceptible and vulnerable populations include people with existing chronic illness, children, pregnant women, older adults, and firefighters and other first responders.

The public health response

- Risk communication to various audiences.
- Cross-sector coordination among partners.
- Identifying and assisting vulnerable populations.
- Monitoring health effects and recommending interventions to mitigate risks.
- Providing health data to inform decision-making.

Adaptation in action: recent success stories

- Improved collaboration has increased organizational resilience.
- Public health-assisted evacuations reached vulnerable populations.
- New Clean Air Spaces were opened.
- Tools were updated and used more.

Wildfire projections: a look ahead

Air pollution from increased wildfire smoke is expected to increase risk of respiratory and cardiovascular illnesses by 160% by 2050.

Challenges identified

- Public health capacity and inclusion.
- Cascading and overlapping hazards.
- Addressing behavioral health effects.
- Risk communication regarding the use of masks.
- Clean air at home is generally better than traveling to a "clean air space."
- Risk communication fatigue and recommending realistic actions.
- Smoke blowing in from out-of-state.
- Accessing data for planning and response.

Opportunities for future adaptation

Many of the opportunities identified below require additional capacity, funding or changes in systems and policies. A next step will be to consider which policy areas are most important to prioritize in the coming years.

- **Invest in preparedness and response workforce** (e.g., increase protections for vulnerable workers; conduct joint training with emergency management partners on best practices in trauma-informed care; develop strategies for addressing staff burn-out).

- **Continue to improve collaboration across levels of government** (e.g., engage in more table-top exercises and scenario planning; explore mechanisms for increasing involvement of public health in law enforcement-led planning and response).

- **Increase proactive communication of data to decision-makers** (e.g., provide community partners and local media with pre-season briefings; work with partners to provide guidance on retrofitting facilities to serve as clean air spaces).

- **Standardize a tiered messaging strategy that addresses different phases of a smoke or wildfire event** (e.g., develop different communication tools for different phases; have regional health equity coalitions [RHECs] review).

- **Partner with coordinated care organizations (CCOs) to promote self-sufficiency among member populations** (e.g., provide CCOs with the guidance and evidence they need to promote home improvements such as air filters as "health-related services").

- **Take systematic approaches to assessing, identifying and creating clean air spaces** with a prioritization on promoting safe school facilities.

- **Connect new funding opportunities** (e.g., climate investments) to protect indoor air quality at the household level.

- **Increase surveillance and assessment** (e.g., more coordinated use of Oregon's syndromic surveillance system; work with academic partners on estimating health costs of specific events).

- **Engage and inform long-term planning in health and other sectors** (e.g., build staff capacity to engage effectively in other agency-led efforts; integrate hazard- and climate-related data and strategies into community health assessments (CHAs) and community health improvement plans (CHIPs).