

Tracking Climate Health Impacts through Regional Partnerships

Clackamas, Multnomah, Washington Counties (Oregon)



Climate-related health impacts do not stop at county borders, and local health departments have limited resources for surveillance. The tri-county region (Clackamas, Multnomah, Washington County) in Oregon formed a regional partnership to track and report on climate health impacts. This is an important collaboration model to support resilience efforts at the local level.

Climate change is a major public health concern that affects the health and well-being of people living in the Pacific Northwest. The [2021 Oregon Climate Assessment](#) projects an average increase by 5 degrees Fahrenheit by 2050, and 8 degrees by 2080. The 2021 Intergovernmental Panel on Climate Change reported human influence has unequivocally warmed the atmosphere, creating weather and climate extremes around the world.

Climate change events likely to impact health in the tri-county region include heat waves, extreme weather events, conditions that promote the spread and growth of disease-causing insect and bacteria populations, poor air quality, and mental health impacts from ongoing climate events and threats. As in other parts of the country, low-income households and communities of color are experiencing impacts first and worst. Addressing the cause of these environmental conditions and slowing future warming rates will depend on finding ways to reduce greenhouse gas emissions.

In order to plan effective interventions, develop policy that addresses root causes, and allocate needed resources, local jurisdictions need to know the extent of health issues in a community. For climate-related health impacts, there are few surveillance or monitoring systems yet established to provide this information to decision-makers and the public.

Project Description and Outcome

The inaugural [2019 Regional Climate and Health Monitoring \(RCHM\) Report](#) provided benchmark data for health indicators related to five areas impacted by climate change: extreme heat, extreme weather, communicable disease, air quality, and vector-borne disease. The [2021 report](#) updates these health indicators with data from 2018-2020, adds a focus on the impacts from the 2020 wildfire season, and provides a discussion on mental health impacts from climate change and the lack of mental health data sources.

The RCHM report spotlights 12 climate-related health indicators, combining data from several sources to provide number of cases and rate per 100,000. The report is the product of collaboration between health departments in Clackamas, Multnomah, and Washington Counties. Each county led different tasks within the project, including project management, epidemiological analysis, content expertise, and review.

The primary outcome from the project was the development and release of an updated RCHM report, which monitors and contextualizes the health impacts from climate change on the region. This data will support informed decision-making and a “Health in All Policy” approach to climate change mitigation and adaptation work. Through outreach to elected officials, public health officers, and community partners, the report will elevate awareness, educate and inform, and provide specific data when considering regional solutions. This process continued and deepened regional partnership and collaboration to address health impacts from climate change, and provides a platform for future development of programmatic and policy work. The report update process also highlighted direction for future monitoring work. In looking for indicators that track mental health impacts related to climate change, we conducted interviews, a best practice review, and literature scans but did not identify any relevant indicators to adopt. This work also elevated the need for more qualitative outlets to share stories and narratives around the health impacts of climate change.

Lessons Learned

Establishing benchmarks and having surveillance systems in place is critical to understanding and communicating the severity and speed of new climate threats. The data from the RCHM report facilitated understanding of the magnitude of acute events in 2021. When a deadly heatwave hit the Portland region, local health officials relied on the 2019 report for a readily-available documentation of historic levels of heat-related deaths. In the tri-county region, residents often cross county borders to work, live, attend school, and recreate, and the three counties experience similar trends in health outcomes in the face of regional environmental threats like wildfire smoke and extreme heat. This indicates health departments need to work together to create health-promoting and resilient communities. Bringing partners together from across local jurisdictions to work on surveillance provides multiple benefits. It allows health departments to contribute their unique perspectives and expertise on regional issues to work towards a shared goal. It also allows organizations to overcome any limitations they may face internally on their own, like lack of staff capacity, competing organizational priorities, or restrictive funding processes.

This project is based on funding from the National Association of County and City Health Officials, supported by cooperative agreement OT18-1802 from the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (HHS). The contents do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. Government.

Contact Information

Abraham (Abe) Moland
Clackamas County Public Health
amoland@clackamas.us