

RESPONDING TO WILDFIRES AMID COMPOUNDING DISASTERS



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Image: Loyalton Fire in northeast California resulted in evacuation orders amid the COVID-19 pandemic, August 2020. | Manny Becerra



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BACKGROUND

- Climate change poses a grave threat to society and the environment due to more frequent and severe disasters such as destructive storms, droughts, wildfires, and extreme heat.
- Ongoing, complex, and intersecting disasters—including wildfires, extreme heat, power outages, cyber attacks, and the COVID-19 pandemic are radically disrupting the ways in which Californians live and work.
- California is increasingly faced with the need to respond to multiple disasters at the same time or in quick succession.
- Co-occurring disasters can overload the disaster response system by increasing the resources needed at a single point in time.
- Compounding disasters can create a host of new challenges necessitating modified response strategies.

DISASTER RESPONSE IN CALIFORNIA

Over the past several years, California has faced a confluence of disasters, ranging from a pandemic to extreme heat events to wildfires. These compounding disasters overload the disaster response systems that are in place while also interacting to create a host of new obstacles.

For example, typical disaster response pathways like evacuations and shelters to protect the public from wildfire now need to also account for COVID-19 pandemic precautions. Recommendations to close windows to reduce wildfire smoke exposure can clash with advice to open windows to cool down homes without air conditioning during extreme heat events.

Compounding disasters pose challenges as well as opportunities for new mitigation and adaptation strategies that can help lessen the burden of multiple hazards at once.

TERMINOLOGY OF COMPOUNDING DISASTERS

HAZARD

A natural or human-induced event that may alter the normal functioning of a community or ecosystem.

DISASTER

Direct or indirect impacts of a hazard interacting with vulnerable social or environmental conditions that leads to adverse human, material, economic, or environmental outcomes.

COMPOUNDING DISASTERS

Multiple disaster events occurring simultaneously or successively such that when combined, amplify the impacts of the events and lead to more extreme outcomes.

EXAMPLES OF COMPOUNDING DISASTERS IN CALIFORNIA



Figure: Smoke from multiple wildfires shrouds most of California amid the COVID-19 pandemic in October, 2021

Source: NASA Earth Observatory

COMPOUNDING DISASTERS

Climate change is magnifying the impacts of disasters in California and increasing the risk of multiple disasters occurring at the same time. In the summer and fall of 2020 California experienced wildfires across the state, the COVID-19 pandemic, and record-breaking heatwaves.

WILDFIRES AND POWER LOSS

Communities may lose electricity during a wildfire when the fire damages utility equipment or a public safety power shutoff (PSPS) is in place to reduce wildfire risk. Power outages may lead to non-working telecommunications, street lights, and traffic signals, all of which can combine to make it more challenging to safely and effectively evacuate.

SOCIALLY DISTANT EVACUATIONS

In 2020, wildfire evacuation strategies in California were adapted to account for the COVID-19 pandemic. Several counties worked with relief organizations to use hotels as evacuation centers in order to provide evacuees with shelter from the wildfire while maintaining social distancing to reduce spread of the COVID-19 virus.

LEARNING FROM PAST DISASTERS

Lessons learned from the Thomas Fire—including the need to develop culturally-appropriate communications for Indigenous immigrant farmworkers that speak languages other than English or Spanish, or dedicated relief funds for undocumented immigrants who are ineligible to receive federal funds—yielded important improvements in disaster response during the COVID-19 pandemic.



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