

Protecting Indoor & Outdoor Workers: A Summary of Recommendations

The following recommendations were proposed in [Exhausted! Workers Confront Extreme Heat and Wildfire Smoke in California](#), an in-depth examination of how climate change affects workers in California. Click [here](#) to read the full report.

► PROTECTING INDOOR & OUTDOOR WORKERS

1. Create new insurance products for hazard pay and unworkable conditions

The California Division of Workers' Compensation (DWC) should work with the California Department of Insurance (CDI) to develop new insurance products, such as Anticipatory Parametric Insurance Coverage, to provide a safety-net to offset workers' salaries during exceptional weather events. We recommend a tiered system with defined thresholds for: (1) hazard pay and exclusionary pay during extreme heat and poor air quality events; and (2) insurance coverage for workers who are unable to work due to temperatures exceeding thresholds where heat-related deaths begin and air quality index reaches unhealthy levels. In designing the insurance products, special attention should be paid to undocumented workers, who may be hesitant to participate in a state program.

2. Design and build large-scale cooling projects in the built environment

Cities and counties should build neighborhood-wide, even city-wide, cooling projects. Examples of these projects include planting trees, installing shaded bus shelters, retrofitting hot roofs with cool roofs, applying reflective coatings to streets and parking lots and creating supportive community facilities in the form of resilience hubs. Large-scale heat-mitigation measures will allow workers to be less exposed to extreme heat conditions and to recover from heat stress away from the job site.

3. Make home a safe haven

The burden of extreme heat is not limited to the workplace but may also affect the living conditions of workers. Workers may return to overly hot homes. The California Building Standards Commission (CBSC) and California Energy Commission (CEC) should, in an equitable way, expand current standards for home cooling, and target non-air-conditioned buildings to be cooled by heat-pumps. Nighttime recovery from extreme heat exposure is essential for human health.

4. State agencies must coordinate their approach on extreme heat

The effects of extreme heat and wildfire smoke span across multiple sectors. While Cal/OSHA is responsible for conditions at the workplace, the agency is not responsible for worker health away from the workplace. Cal/OSHA does not promulgate building codes, nor plant trees, nor ensure medical care to protect workers. Coordination among state agencies and local governments is necessary for a holistic approach to looking after workers' health.

5. Cal/OSHA must be sufficiently resourced in both funds and technical support

Cal/OSHA is insufficiently staffed and funded. The scant number of field inspectors results in workers being unprotected. The Governor and state legislature must fund Cal/OSHA to update standards and perform educational and enforcement activities to deter non-compliance and reduce the number of workplace injuries. Cal/OSHA staff should be familiar with environmental hazards and how heat and air quality can affect workers.

6. Improve communication on drinking-water

Employers are mandated to provide workers with easy access to drinking water. Yet, the quota system aimed at maximizing productivity dissuades workers from taking water breaks. In fact, workers are financially penalized for taking breaks to drink water. Workers should be encouraged to stay hydrated. We recommend that Cal/OSHA create an educational/communications campaign about the importance of regularly drinking water and the laws that permit such breaks.

7. Expand independent monitoring

Because Cal/OSHA is shorthanded, and cannot witness all violations, there is a need for third-party monitors. Third parties, funded privately or by philanthropy, can bring workplace violations to the attention of Cal/OSHA or the courts to deter harmful labor conditions.

8. Fix Cal/OSHA's communications problem

Many workers don't know of Cal/OSHA's existence or that workers are protected by law. We suggest that Cal/OSHA create a communication campaign that informs workers of their rights, including access to shade and a mandatory cool-down rest, and cite the myriad ways that Cal/OSHA has improved the lives of workers. By helping workers understand that Cal/OSHA is here to help, workers can feel more empowered to cite violations and file complaints anonymously without fear of retaliation from their employers.

9. Environmental organizations must prioritize worker health and safety

Mainline conservation and environmental organizations have been heretofore silent about the fate of agricultural and supply chain workers as they face extreme weather conditions. Environmentalists should promote laws that protect human health with equal vigor as they advocate for the health of the natural world.

10. Develop a Cal/OSHA database on heat-related workplace incidents

Develop a centralized data system on heat-related workplace incidents linked to a statewide heat syndromic surveillance system, like the one being developed by the California Department of Public Health (CDPH). The data will provide critical feedback for researchers and policymakers.

11. Improve air quality monitoring at the workplace

The recently adopted Cal/OSHA standard to protect workers from wildfire smoke requires employers to monitor the air quality index (AQI) for particulate matter with a diameter of less than 2.5 micrometers (PM2.5). We recommend Cal/OSHA take the further step of mandating the implementation of low-cost network-enabled air quality sensors and thermometers to upload findings "live" to the web.

12. Fund organizations to assist workers

Communicating with workers about their rights and the dangers of heat is extremely important. California is blessed with nonprofit groups that support at-risk workers, such as 805 UndocuFund, Warehouse Workers Resource Center, IDEPSCA and California Rural Legal Assistance (CRLA). Communication campaigns (recommendations #6 and #8) and monitoring (recommendations #7 and #10) may be best performed by organizations that are already trusted by at-risk workers.

► SPECIFICALLY PROTECTING OUTDOOR WORKERS

13. Provide clean air refuges during wildfire smoke events

Employers should provide clean air spaces to reduce smoke exposure to outdoor workers, especially during mandated breaks. These temporary shelters with air purifiers would allow employers to continue crucial work during harsh conditions.

14. Make growers liable

Some growers are currently exploiting loopholes, effectively ducking enforcement for labor violations, by hiding behind contracts with farm labor contractors, who act as brokers of labor. We recommend that Cal/OSHA formally close these loopholes.

► SPECIFICALLY PROTECTING INDOOR WORKERS

15. Prioritize adoption of the Indoor Heat Illness Prevention Standard

Cal/OSHA should quickly finalize the Indoor Heat Illness Prevention Standard. Bureaucratic foot-dragging has impeded progress, even though a final draft exists. Also, once adopted, Cal/OSHA should perform robust outreach and education about the new regulation.

16. Update the California Building Code to protect warehouse workers

The California Building Standards Commission (CBSC) and the California Energy Commission (CEC) should update the Building Energy Efficiency Standards (Title 24) to address both energy efficiency as well as indoor air temperature. Should the Commissions fail to mandate these protections, local jurisdictions, via their own local building and safety departments, should develop their own protective building codes for warehouses, and then file for exemption from the state code.

17. Update international standards to include real-time indoor temperature and humidity monitoring

Real-time monitoring of indoor temperature and humidity can be incorporated in new building design via the international standards of ASHRAE/IES Energy Efficiency Standard 90.1 and the International Energy Conservation Code (IECC). Such monitoring is key to ensuring compliance with the hopefully soon-to-be enacted Indoor Heat Illness Prevention Standard. Monitoring technology also removes the responsibility of the worker to file a complaint against their employer and would reduce the fear of termination.

18. Prioritize research into worker productivity and absenteeism

Extreme heat has demonstrably affected worker productivity and absenteeism. The impacts are well-established. Yet, quantifying the specific economic losses associated with impacts are less well known. Businesses are likely losing money by not providing a cool working environment – but the case must be made. We recommend that the Fifth California Climate Change Assessment allocate funding for research to quantify economic losses due to heat and smoke exposure within various sectors in California.