Climate Adaptation on Site: Floods, Wildfire Smoke, Extreme Weather Fatality File



Heat-related workplace fatalities rose 18.6 percent in 2022 as OSHA warns of escalating climate-driven hazards to outdoor workers across the United States

What Happened

On July 28, 2023, a 33-year-old construction worker died after suffering heat stroke in Huntsville, Alabama — one of 43 U.S. workers who died from environmental heat that year, a figure that had risen 18.6 percent from the prior year. That same summer, wildfire smoke from Canadian wildfires blanketed the northeastern United States, exposing millions of outdoor workers to hazardous AQI conditions with no federal wildfire smoke standard in place. In January 2025, wildfires swept through Los Angeles County and construction workers — many of them day laborers — were documented continuing to work on active job sites inside evacuation zones and under hazardous smoke conditions, with no respirators, no air quality monitoring, and no stop-work authority provided by their employers.

What Went Wrong

The same pattern appears across all three events: no worksite weather monitoring, no pre-established stop-work threshold for air quality or temperature, no climate-adapted emergency plan, and workers who lacked the knowledge or authority to remove themselves from conditions actively endangering their health. Fatalities due to exposure to extreme temperatures increased 18.6 percent in 2022, rising to 51 from 43 in 2021, according to OSHA. The controls — respirators, air quality monitoring, heat illness prevention plans, and stop-work authority — are available. What is missing is implementation before the weather event arrives.

The Bottom Line

Climate-driven hazards are not arriving without warning — they are intensifying

on a schedule that worksite safety plans have not kept pace with. Every worksite needs a current emergency plan that includes thresholds for stopping work, shelter or evacuation procedures, and workers who know — and have the authority to act on — what those thresholds are.

Source: https://www.osha.gov