Heat-related deaths among construction workers

Heat-related deaths among construction workers in the United States


Overview

Heat is a severe hazard for construction workers around the world and may be worsening as a result of climate change. The authors analyzed heat-related deaths in the Census of Fatal Occupational Injuries from 1992 to 2016 to examine this type of death in relation to time, region, and temperature and to explore a possible association with climate change.

Key Findings

- Construction workers, who compose 6% of the total workforce, accounted for 36% (n = 285) of all occupational heat-related deaths from 1992 to 2016 in the U.S.
- Increasing summer temperatures in the contiguous U.S. were associated with higher heat-related death rates, and the annual number of heat-related deaths in construction rose significantly over time.
- Compared to all construction workers, a statistically significant elevated risk of heat-related death was found among Hispanics, in particular workers born in Mexico.
- Cement masons were 10 times more likely to die from heat than the average construction worker; roofers and helpers were seven times more likely.
- Effective workplace interventions (such as acclimatization, ready access to water, and rest breaks), enhanced surveillance, and improved regulations and enforcement should accompany broader efforts to combat global warming.
- The construction industry can help reduce global warming through increased implementation of green building principles.

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See abstract:

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