# Protecting workers in extreme heat

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According to new research by the University of Adelaide, workplaces may not be well-prepared to protect their employees against heat-related illnesses and injuries, as the threat of climate change looms and Australian average temperatures are expected to increase 1-5°C by 2070.

Professor Peng Bi led a team of researchers from the University of Adelaide's School of Public Health that linked data from worker compensation claims with temperature records. They found that there was an association between hotter temperatures and an increase in injury claims.

"We looked at the worker compensation claims for those who commonly work outdoors, including construction workers, farmers, emergency services officers and utility employees," says Professor Bi. "What we found was that once the mercury approached 37.7°C, there was a considerable increase in injuries recorded."

"We found that the types of injuries and illnesses that occurred on particularly hot days were also largely preventable and included incidents like falls, poisoning due to chemical exposure, occupational burns and heat stroke," he says.

Dr Jianjun Xiang, also from the University's School of Public Health, conducted a survey among Australian occupational health and safety (OH&S) specialists about workplace heat exposure.

He found 90% of the OH&S specialists surveyed were concerned about

extreme heat and staff safety. The paper was published in the journal *PLOS ONE*.

"We surveyed 180 OH&S specialists who provide advice on heat stress management to industries and almost all of them were at least moderately concerned about extreme heat, and 19% suggested a need for improvement of current heat stress prevention measures in their workplace," says Dr Xiang.

Professor Bi says it is clear from this research that more needs to be done to protect workers in extreme heat.

"There are numerous measures that can be put in place to protect workers from heat-related injuries, including adjusting work hours, taking more breaks, providing good hydration and offering more flexible work arrangements," says Professor Bi.

"We know that many companies do have heat-exposure policies but this research demonstrates a need for a better nation-wide policy," he says.

**More information:** "Perceptions of Workplace Heat Exposure and Controls among Occupational Hygienists and Relevant Specialists in Australia." *PLoS ONE* 10(8): e0135040. DOI: 10.1371/journal.pone.0135040

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