

## CURRENT TOPICS

# Climate Change, Heat, and Farmworker Health

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Heat exposure is a major concern for farmworkers in the United States—most of whom are Latinx, exempt from labor and social protections, and at high risk for heat-related adverse health outcomes (Kuehn, 2021). Farmworkers have enhanced vulnerability to heat due to work conditions (e.g., long working hours) and social conditions (e.g., poverty, substandard housing, undocumented status), which further exacerbates this vulnerability. With more frequent and severe heat waves in coming decades due to climate change, implementing heat-related safety measures to protect farmworkers is increasingly urgent (Balbus et al., 2016).

Consistent with previous research (El Khayat et al., 2022; Mac & McCauley, 2017), our work through the Michigan Farmworker Project (Handal et al., 2020) identified farmworker's health concerns due to prolonged heat and sun exposure including nausea, tiredness, dizziness, and fainting. Participants reported using hats and long-sleeved shirts to avoid potential burns and heat exposure. Long-term effects of chronic sun exposure, such as skin cancer, were a concern shared by some in our study, yet farmworkers generally lack knowledge about sun and skin cancer risks (Kearney et al., 2014). Farmworkers discussed facing complex working dynamics of control and power that jeopardize their ability to implement heat safety practices. Participants reported limited opportunities to adequately hydrate or avoiding stopping to drink water to keep up with the fast work pace—a situation exacerbated by a piece-rate payment system, which incentivizes working faster and minimizes breaks as earnings depend on amounts of crop units harvested. Finally, participants noted insufficient information on the dangers of heat exposure and exhaustion, consistent with the literature.

Climate change and its effects on health related to increasing duration, frequency, and intensity of heat waves and resulting exposure in farmworkers reinforce the need for occupational health and safety nurses in farmworker communities to enhance advocacy, assessment, and mitigation of heat-related risks and to improve education and training of local outreach and community health workers on identification of heat hazards (Culp et al., 2011). Occupational health and safety nurses can promote common heat

preventive measures for farmworkers such as drinking more water, taking breaks in shaded areas, going to air-conditioned places during or after work, gradually increasing work hours at the start of the season, and taking extra breaks.

Beyond these direct preventive measures, occupational health and safety nurses are at the front line of patient care and therefore can influence policies and regulations on integrating environmental with occupational health to address heat-related injuries, illnesses, and deaths in this vulnerable worker population. Their clinical expertise lends additional credibility to advocacy efforts that employers may see as profit-reducing. The Migrant Clinicians Network provides important resources for heat prevention including policy actions that can be useful for occupational health and safety nurses and workers (<https://www.migrantclinician.org>).

Because of the unique qualifications of occupational health and safety nurses, expanding occupational health and safety nurse collaborations with employers and advocates can enhance implementation of specific actions to minimize heat impacts in this important workforce, which sustains the food system of our nation.

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