# Recognizing and Mitigating the Impact of Medications on Heat-Related Illness in Older Adults: A Scoping Review

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Older adults are uniquely susceptible to heat-related illness, including hyperthermia due to thermoregulatory impairment, dehydration, and electrolyte abnormalities. It is generally recognized among clinicians that medication use plays a role in heat susceptibility; however, both accelerating climate change and increasing rates of medication use accentuate the need for additional research. The objective of this scoping review was to investigate current literature regarding the heightened risk of medications and heat-related illness in older adults and to reveal areas of future research need. Investigators queried the databases PubMed, Embase, Web of Science, and Scopus; English-language primary studies and case reports published between January 2000 and June 2025 were considered for inclusion based on a predefined Population, Concept, Context (PCC) pertaining to the research questions. Additionally, a grey literature search was conducted to map existing mitigation strategies in the United States. Two reviewers independently screened studies for eligibility using Covidence and one reviewer extracted data. A total of 61 primary studies and 41 grey literature sources were identified. An abundance of epidemiological studies demonstrate greater incidence of heat-related morbidity and mortality for older age groups, but few experimental studies evaluating the role of medications exist. There are many educational resources and public health efforts aimed at reducing health impacts of heat, yet limited well-researched, specific information is available for patients and clinicians on managing drug-heat interaction. This scoping review highlights a need for more studies investigating the confluence of age, multimorbidity, medication use, and heat-related illness in order to inform future mitigation efforts. Supported by NIH R25ES020721.