HeatReadyTM Initiatives: Addressing Extreme Heat Challenges

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Background

Extreme Heat presents a critical and increasingly urgent challenge, exacerbating existing stressors disproportionately affecting underserved populations, and presenting profound health risks.

Starting in 2017, the HeatReady™ Program emerged out of the desire to protect those most vulnerable to extreme heat. The program goes beyond merely reducing heat impacts—it emphasizes preparedness, detailed tracking and impactful response to protect human health from the dangers of heat.

The HeatReady™ program enables cities, neighborhoods, and schools to identify, prepare for, mitigate, track and respond to the negative impacts of extreme heat.

HeatReady™, focuses on processes and strategies that are community-specific, leveraging a network of experts across heat and health as well as local knowledge and experiences.

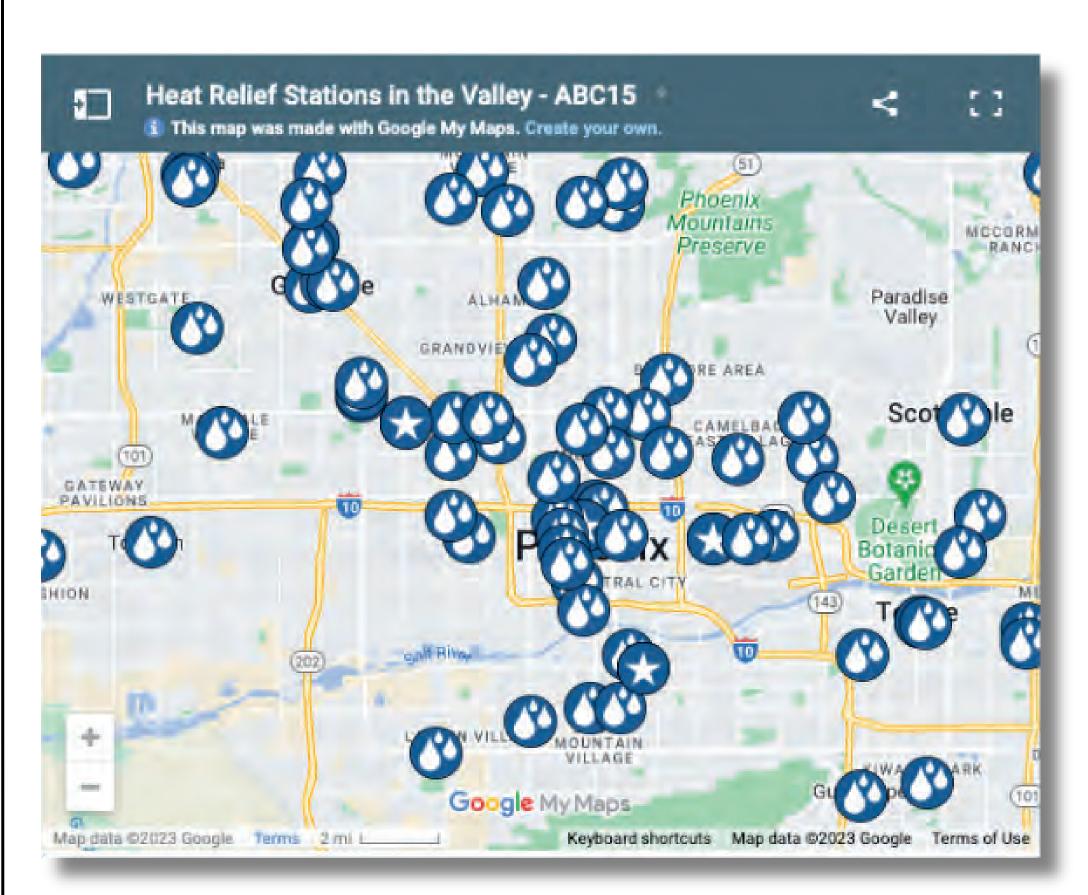
HeatReady Highlights

- HeatReady[™] Schools tree planting events with TSD3 increasing canopy cover along the Rio Salado.
- HeatReady™ Neighborhoods
 Community Action Plan developed in collaboration with RAIL CDC for Mesa.
- Increase in canopy and shade cover for schools through City of Phoenix grant.
- HeatReadyPhx's We're Cool Heat Relief Outreach was recognized by the EPA as one of ten exemplary heat communication and outreach campaign across the country.
- HeatReady[™] research projects include school temperature measurements and individually experienced heat studies.

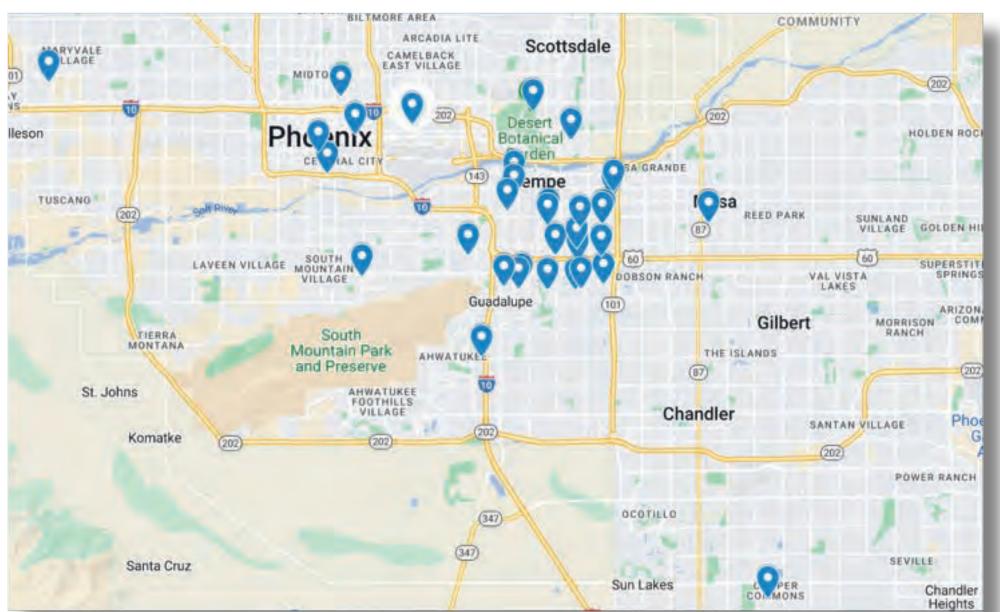


Scan to learn more!





Map of the Maricopa Association of Governments Heat Relief Stations across the Phoenix Metro area during the summer of 2023. Courtesy of ABC15. Map of HeatReady™ Schools partner schools and community centers in the Phoenix Metro area (2024).



HeatReadyTM Initiatives

HeatReady™ Cities

The City of Phoenix is spearheading
HeatReady™ Cities, with the nation's first local
Office of Heat Response and Mitigation (OHRM
or HeatReadyPhx), led by Dr. David Hondula.
HeatReadyPhx coordinates programs and
policies year-round to help lower urban
temperatures and protect public health, while
tracking trends, collecting data, and
collaborating with other governments and
organizations to share ideas and solutions to
deal with extreme heat.





HealReady Neighborhoods Community action plan Plan de acción comunitaria Phase 1 Phase 2 Cultural Competency Inacyency Inclusion Incl

HeatReadyTM Neighborhoods

Community co-created rubric for optimizing neighborhood assets or "heat resource sheds" around equity and inclusion, neighborhood cohesion, education and advocacy, emergency preparedness, physical or landscapelevel changes, and funding.

Neighborhoods implement evidence-based solutions, creating cool zones and strengthen networks to mitigate extreme heat impacts and prepare for a hotter future environment.

HeatReadyTM Schools

30 data-driven recommendations on 5 action areas: Training, prevention, school policy, community, and environment.
As of 2023, there are 40 active partnerships in schools and community centers in the Phoenix Metro area.

HeatReady™ Schools partners receive tools, resources and funding opportunities. Collaborations with local and state organizations on

heat mitigation and adaptation projects.



Shortridge, A., VI, W. W., White, D. D., Guardaro, M. M., Hondula, D. M., & Vanos, J. K. (2022). HeatReady Schools: a novel approach to enhance adaptive capacity to heat through school community experiences, risks, and perceptions. Climate Risk Management, 36, 100437.
Guardaro, M., Gastelum, A., Winkle, R., Munoz Encinas, M., Vanos, J., Shortridge, A., Basset, S., & Hondula, D. (2022). HeatReady

- Guardaro, M. (2023). Strengthening Heat Action Plans in the United States. American journal of public health, 113(5), 465-467.
 Guardaro, M., Messerschmidt, M., Hondula, D. M., Grimm, N. B., & Redman, C. L. (2020). Building community heat action plans story by story: A three neighborhood case study. Cities, 107, 102886.
 Vanos, J. K., Herdt, A. J., & Lochbaum, M. R. (2017). Effects of physical activity and shade on the heat balance and thermal perceptions of children in a playground microclimate. Building and Environment, 126, 119-131.
- Acknowledgements
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