

Rural and Environmental Health: A Crossroads

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Disclosures

Affiliations:

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(2025-Current)**

Nurse Scientist, La Isla Network (2024-Current)

Funding:

Farmworker Family Health Program (2019-Current)

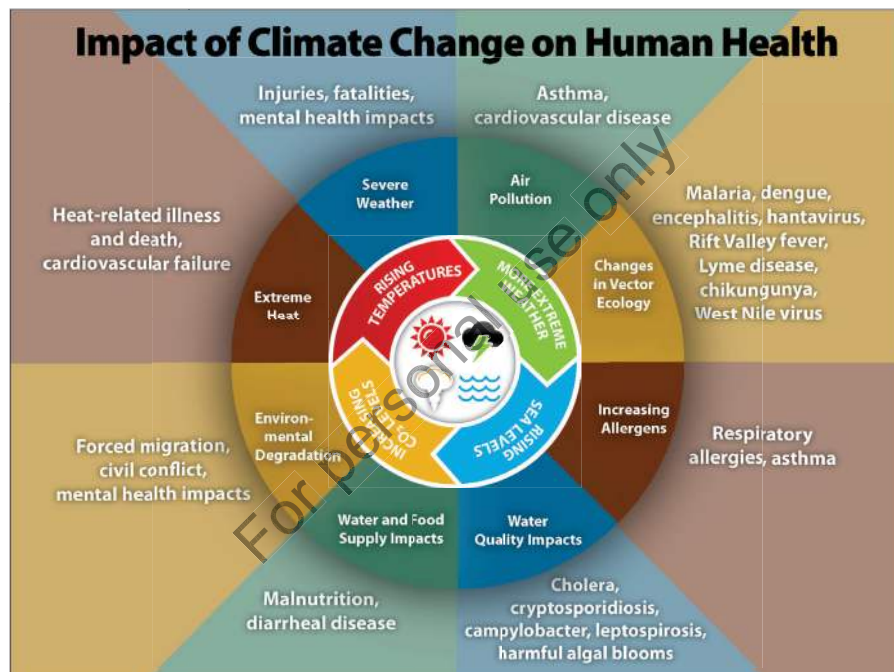
NINR - K01NR021272 (2024-2027)



Objectives

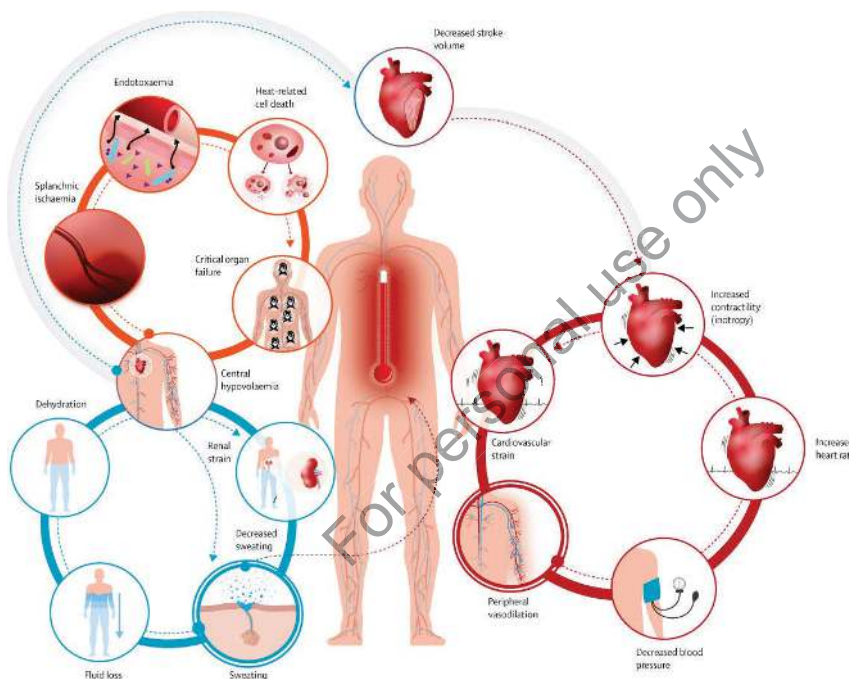
Objectives for Today

- Explain the intersection of healthcare access, rural health and environmental health.
- Discuss the impact of environmental factors on cardiovascular disease
- Identify approaches to enhance access to healthcare including telemedicine, mobile health units and community health workers.



Heat Related Illness 101

- Continuum of Symptoms
 - Extreme Thirst/Nausea & Vomiting/Cramps → Heat Stroke and Death
- No Federal Heat Standard
- Rural EMS times >>> Urban



Ebi, K. L., Capon, A., Berry, P., Broderick, C., de Dear, R., Havenith, G., ... & Jay, O. (2021). Hot weather and heat extremes: health risks. *The lancet*, 398(10301), 698-708.

Heat Related Illness 101, cont.

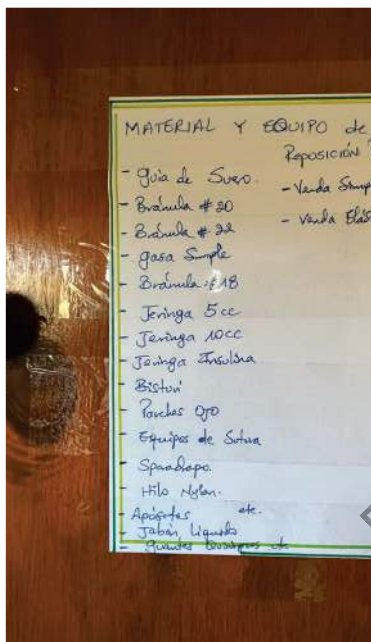
- Undocumented Crop Workers >>> Civilian Workers
- Farmworkers often unsure of how to identify and respond in the workplace (Smith et al., 2021).
- Compensation Level
 - Piece rate is BAD.
- Decreased Access to Healthcare
- Cultural Differences
 - KSQ now seeing more Mam
- Housing & Compounding Occupational Stressors



What to do about this...

- Telemedicine, mobile health units, and community health workers (CHW)!!!
- Farmworker Family Health Program
 - Train Students & Provide Health Care to Migrant Farmworkers in SE GA.
 - Mobil health units and CHWs
- La Isla Network
 - Rest, Shade, Hydration Intervention
 - Occupational Mobile Health Units and Community Health Workers





My Ask to You, CV Nurse Researcher Extraordinaire

- Include environmental variables in your studies.
- Analyze the zip code's impact on your associations.
- Use your grant funding to get healthcare to those who need it most.
- Most importantly...
- **If you ate today, thank a farmworker!**



Additional Citations

- Hansson, E., Jakobsson, K., Glaser, J. R., Wesseling, C., Chavarría, D., Lucas, R. A., & Wegman, D. H. (2024). Association between acute kidney injury hospital visits and environmental heat stress at a Nicaraguan sugarcane plantation. *Workplace Health & Safety*, 72(4), 131-142.
- Orantes-Navarro, C. M., Herrera-Valdés, R., Almaguer-López, M., López-Marín, L., Vela-Parada, X. F., Hernández-Cuchillas, M., & Barba, L. M. (2017). Toward a comprehensive hypothesis of chronic interstitial nephritis in agricultural communities. *Advances in chronic kidney disease*, 24(2), 101-106.
- Smith, D. J., Ferranti, E. P., Hertzberg, V. S., & Mac, V. (2021). Knowledge of heat-related illness first aid and self-reported hydration and heat-related illness symptoms in migrant farmworkers. *Workplace Health & Safety*, 69(1), 15-21.
- Smith, D. J., Mizelle, E., & Modly, L.A. (2023). Climate change and outdoor worker health: The role of the nurse. In R. McDermott-Levy, K.P. Jackman-Murphy, J. Leffers, & A.G. Cantu (Eds.), *Environmental Health in Nursing* (3rd ed., pp. 303-308). Alliance of Nurses for Healthy Environments

