

ASHT 2024 ANNUAL MEETING

September 26-29, 2024 | St. Louis, MO

The Hand We Play

The Role of the Hand Therapist in Environmental Stewardship

Cindy Ivy OTD, MEd, CHT



INTEGRATING PERSPECTIVES: Learning, Collaborating and Innovating

Land & Labor Acknowledgement

“We are on the lands of over 12 indigenous tribes who lived in St. Louis. They experienced forced and voluntary relocation, destruction of mounds, and boarding schools.

This whole country was founded on slavery. St. Louis was home to 2 major slave trade auctions.

We still do not give these communities and cultures, along with others due respect and honor.

It is so important to say this because a lot of our issues today stem from extracting and exploiting their resources, brilliance and life.”



Aletha Maybank, MD, MPH
Chief Health Equity Officer and
Senior Vice President
American Medical Association
2024

*“center the experiences of all those who
have been marginalized”*



Nathalie Barr

died 1993

“Lively Splints”



LMB, 2024



Mackin, 1988 in J Hand Ther

Parry, 1993 J Hand Surg

A photograph of a person in mid-air, jumping between two large, brown, textured rock formations. The person is wearing a dark blue t-shirt, light-colored shorts, and sneakers. The background is a sky filled with soft, white and grey clouds. The overall scene conveys a sense of adventure and risk-taking.

Comfort Zone

Photo of
Jonah Ivy

The Role of the Hand Therapist in Environmental Stewardship

Objectives

Learning

- Relevancy of environmental stewardship to hand therapy. Understanding our role in climate change.

Collaborating

- How can we collaborate with healthcare professionals, professions outside of healthcare and our patients. What can we do to contribute?

Innovating

- Call to Action: Shifting the paradigm and redefining health and wellbeing



Image from Kit Kline, Nature Based Therapy

INTEGRATING PERSPECTIVES: Learning, Collaborating and Innovating

Environmental Stewardship



- Actions
- Protect, Care for the environment
- Responsibly use the environment
- Pursuit of environmental and/or social outcomes
- Diverse social-ecological contexts

Bennett et al,(2018) Environmental stewardship: A conceptual review and analytical framework.

The Role of the Hand Therapist in Earth Stewardship

“If we are not a part of the solution, we are a part of the problem”

Richard W. Johnson



Image from Kit Kline, Nature Based Therapy

INTEGRATING PERSPECTIVES: Learning, Collaborating and Innovating



Learning

Embracing Continuous Reflection and Education

- Relevancy of earth stewardship to hand therapy.
- What impact does the environment have on our patients?



Sustainability

“meeting the needs of the present without compromising the ability of future generations to meet their own needs”

United Nations, 1987 p. 15

“...a balance between human beings and the natural world and to preserve that balance for the benefit of future generations.”

**Hawkins et al.,2017
Clarkson et al. 2017**

Rebecca Tsosie PhD, (2014) Arizona State University

Relationship to Hand & UE Therapy



Dennis Finley, National Geographic



IPCC Report, 2022
Morrison et al. ,2022
Romanello et al., 2022

Pipeline, 2015

Social Determinants of Health



Social Determinants of Health
Copyright-free

 Healthy People 2030

Sustainable Development Goals 2030



 Healthy People 2030

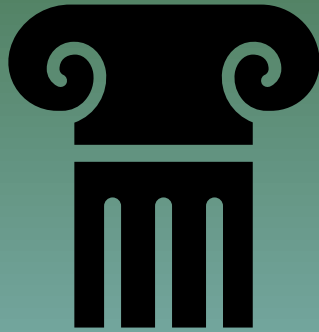


Intergovernmental Panel on Climate Change, 2022
Taff et al., 2023
Shaw et al. 2021

Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.

Use of UN Sustainability Development Goals to achieve Planetary Health¹

Economic



Social



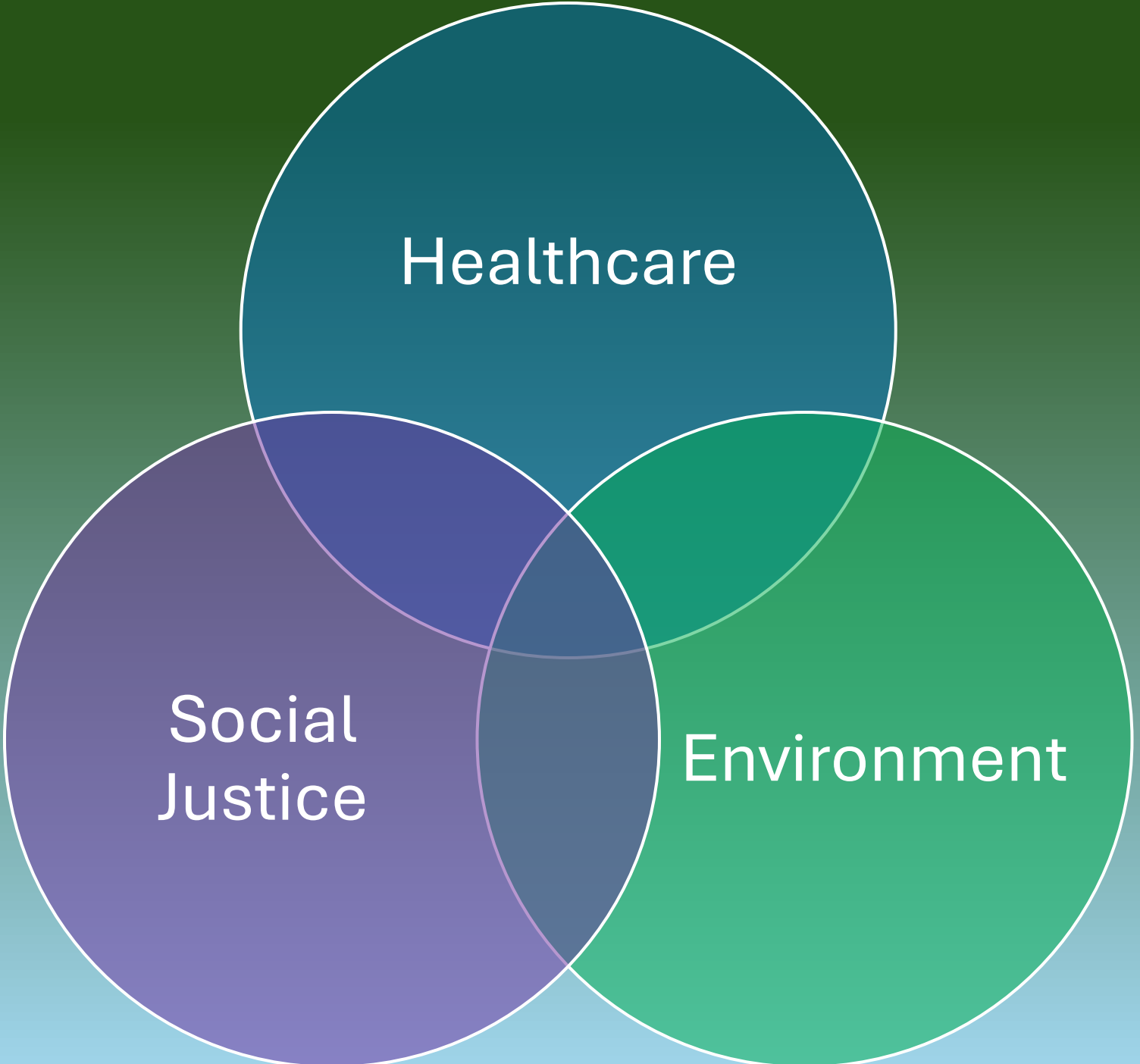
Environmental



<https://www.youtube.com/watch?v=0XTBYMfZyrM>

Eustachio, et al. (2024). Fostering the discussion of planetary health in occupational therapy and physiotherapy. *Australian Occupational Therapy Journal*


¹ Horton, R., & Lo, S. (2015). Planetary health: A new science for exceptional action. *The Lancet*



Healthcare

Social
Justice

Environment



Parsons et. Al (2024) Climate change and inequality. *Pediatric Research*

Berberian et al.(2022) Racial Disparities in climate change-related health effects in the United States, *Current Environmental Health Reports*

Woods Hole Oceanographic Institute

allergies

Science

<https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/index.html>

Equality



The assumption is that everyone benefits from the same supports. This is equal treatment.

Equity

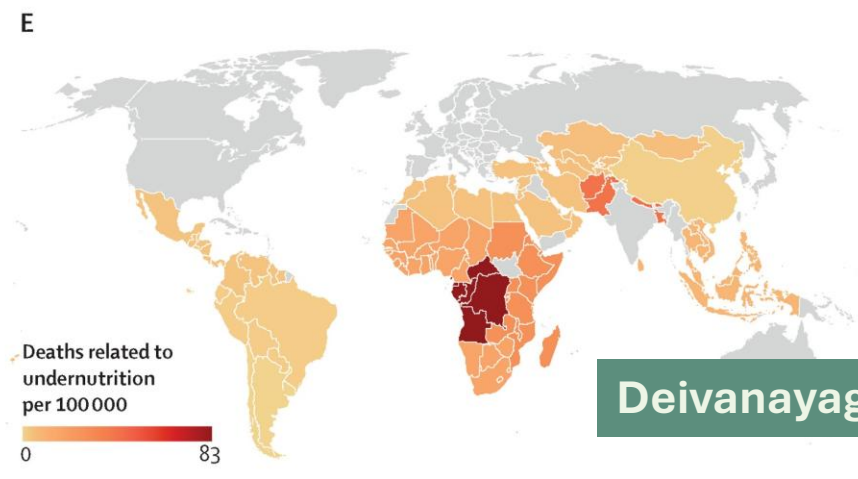
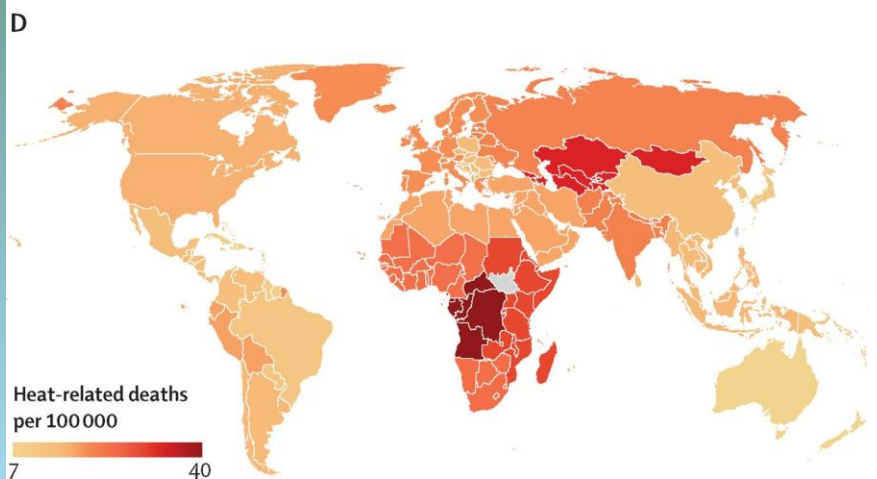
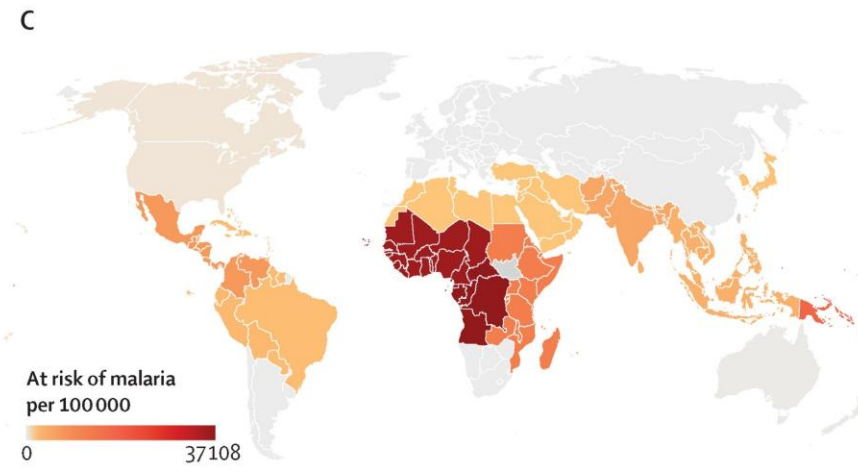
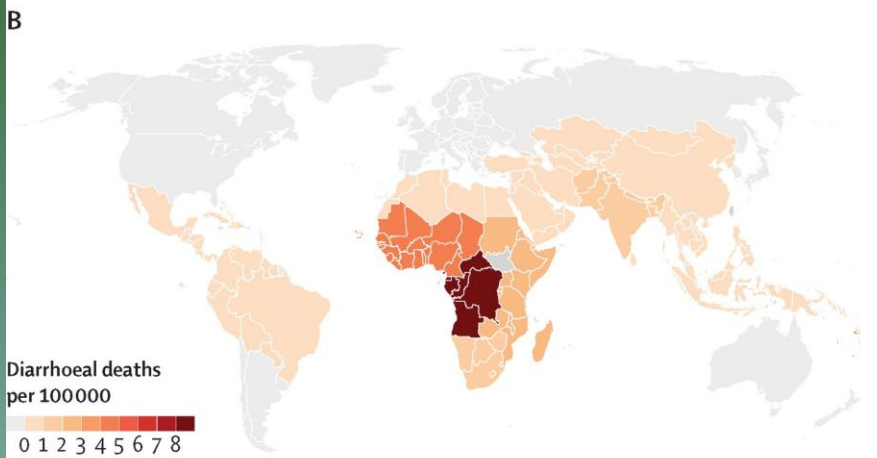
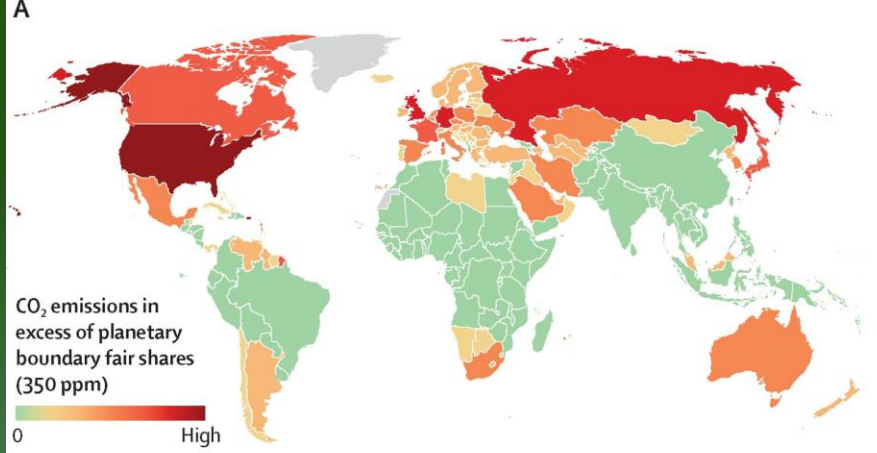


Everyone gets the supports they need (this is the concept of "affirmative action"), thus producing equity.

Justice



All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed.** The systemic barrier has been removed.





PROTECT
OAK FLAT
APACHE
STRONGHOLD
www.apache-stronghold.com

YOU ARE ON
NATIVE LAND



Photo: Ramber, AZ Central;, April 12,2022

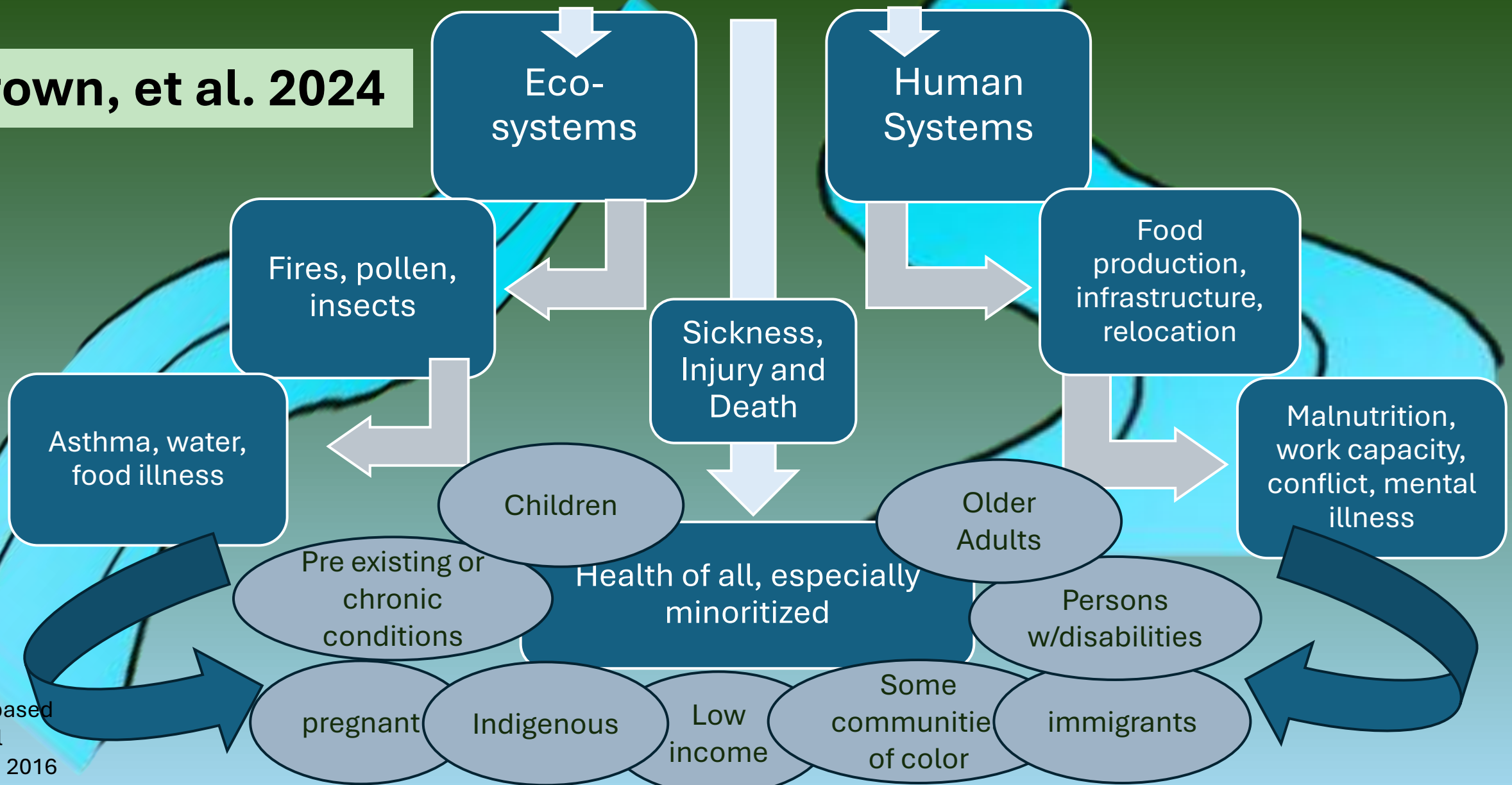
Kickbusch & Gleicher, 2012) (definition by WHO)

1



Warmer Temperature, changing Rainfall, frequent extreme events, increasing fires, rising sea levels

Brown, et al. 2024



loosely based on visual By Ocko, 2016

PubMed Search Strategy, October 2023, May 2024

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("sustainability" OR "sustainable" OR "social justice" OR  
"harm reduction" OR "health equity" OR "climate activism"  
OR "EDI" OR "DEI") AND ("climate change" OR "global  
warming" OR "planetary health" OR "ecosystem" OR  
"ecological justice" OR "environmental justice" OR "critical  
consciousness" OR "structural awareness" OR  
"intersectionality" OR "decolonization" OR "ecological  
solidarity" OR "indigenous knowledge") AND  
("occupational therapy" OR "physical therapy" OR "hand  
therapy" OR "public health")
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H. P., de Moraes Sato, P., Selvarajah, S., Sharma, G., & Devakumar, D. (2023). Envisioning environmental equity: Climate change, health, and racial justice. *The Lancet*, 402(10395), 64–78. [https://doi.org/10.1016/S0140-6736\(23\)00919-4](https://doi.org/10.1016/S0140-6736(23)00919-4)

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Krieger, N. (2020). Climate crisis, health equity, and democratic governance: The need to act together. *Journal of Public Health Policy*, 41(1), 4–10. <https://doi.org/10.1057/s41271-019-00209-x>

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Health Care &
Hand Therapy

Environmental
Stewardship

Social Justice

ASHT Sustainability Task Force

Strengths

- Leaders in our field
- Resources
- Ability to broadly communicate
- Already have “recycling” mind

Weaknesses

- Lack of knowledge
- Lack: communication

SWOT

Opportunities

- Can be early adopters
- Compare in vs outpatient

Threats

- Costs
- Infection Control
- Regulations

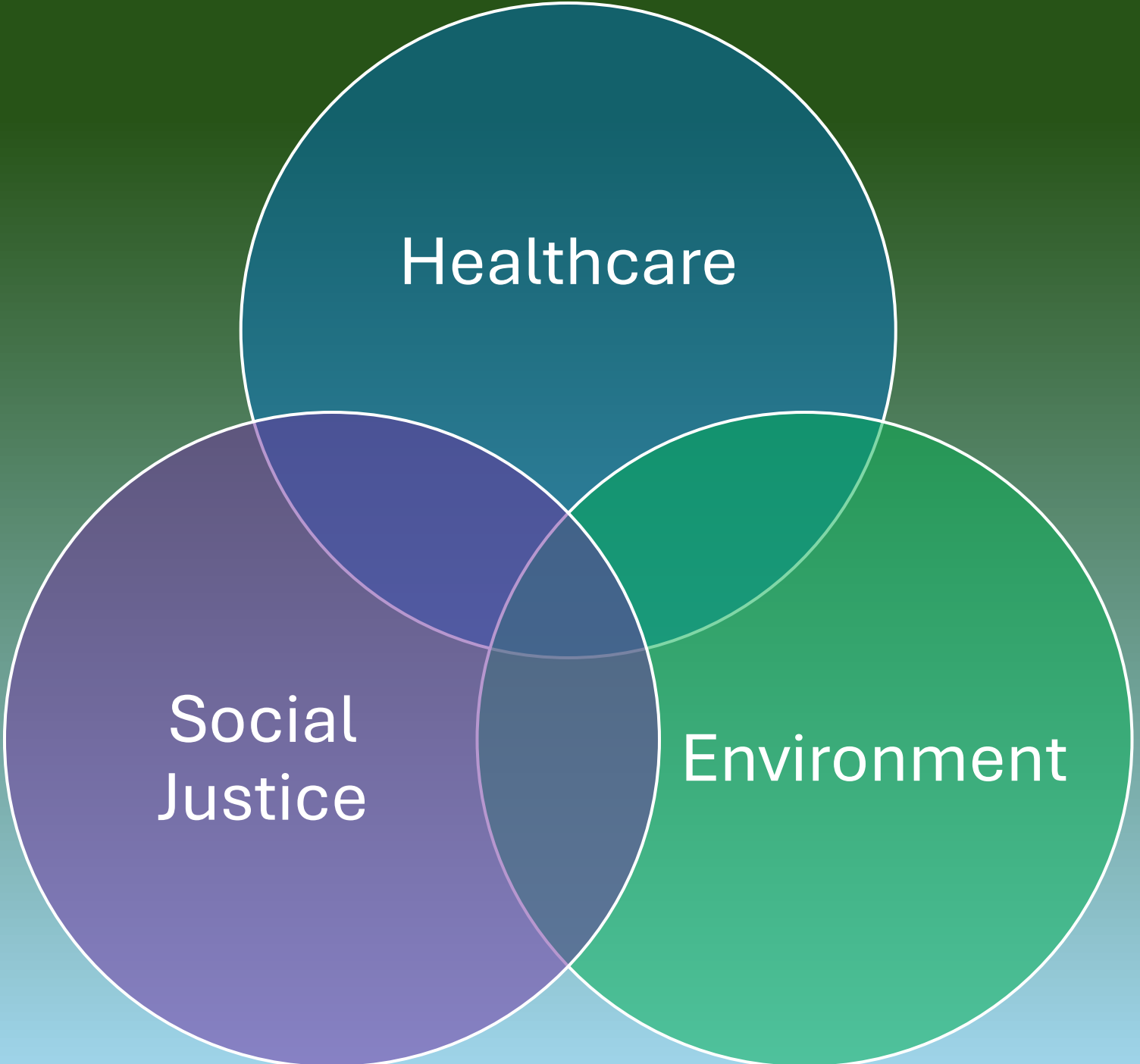


Palstam, A. (2021.). A call to include a perspective of sustainable development in physical therapy
From: Environmental Physiotherapy Association

We Are Motivated!



Farzad, M., Naqui, Z., MacDermid, J., & Cuyper, S. (2024). Sustainable practices in hand therapy: A global perspective. *The Journal of Hand Surgery, European Volume*



Healthcare

Social
Justice

Environment



THE OUTSTANDING SCIENTIFIC POSTER AWARD

IS PRESENTED TO

CYNTHIA IVY, OTR, CHT

FOR THE POSTER ENTITLED

"KEEPING IN TOUCH WITH THE ENVIRONMENT-
CONTRIBUTIONS OF A HAND THERAPY PROGRAM"

AMERICAN SOCIETY OF HAND THERAPISTS
FOURTEENTH ANNUAL CONFERENCE
SEPTEMBER 26, 1991

Use/Recycle

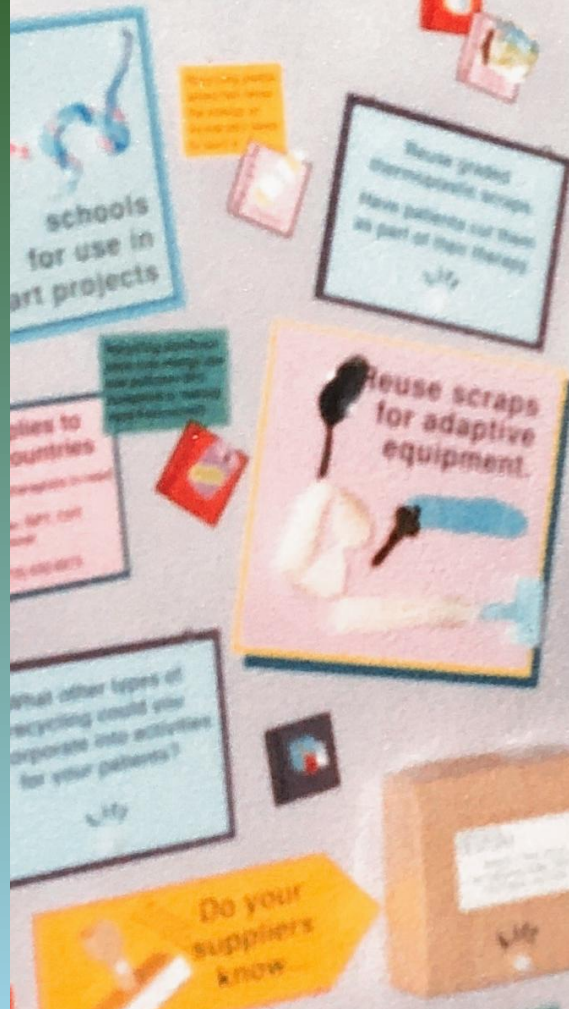
Save Our Splinting Materials

schools for use in art projects

Reuse girded thermoplastic strips. Have patients cut them as part of their therapy.

Reuse scraps for adaptive equipment.

Do your suppliers know...



Reduce Wastes



Reduce CFCs by...

Reduce waste with...

Reduce CFCs by...



Reduce Toxins

91 Ideas for 1991

Reduce CFCs by...



Recycling

-Paponicolas, et al. (2018) *Jama*

McGain et al., (2009), *Anesthesia*



<https://www.buschsystems.com/blog/buschjuly2022-2159/>



Bernice Olmedo, Aithé, 2023, *Paris*



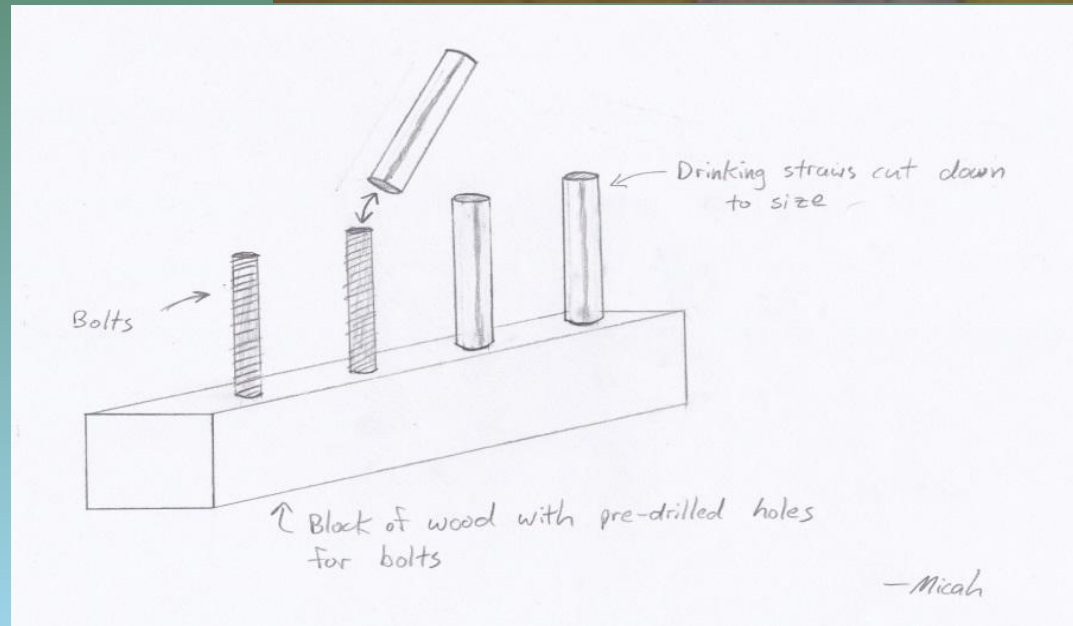
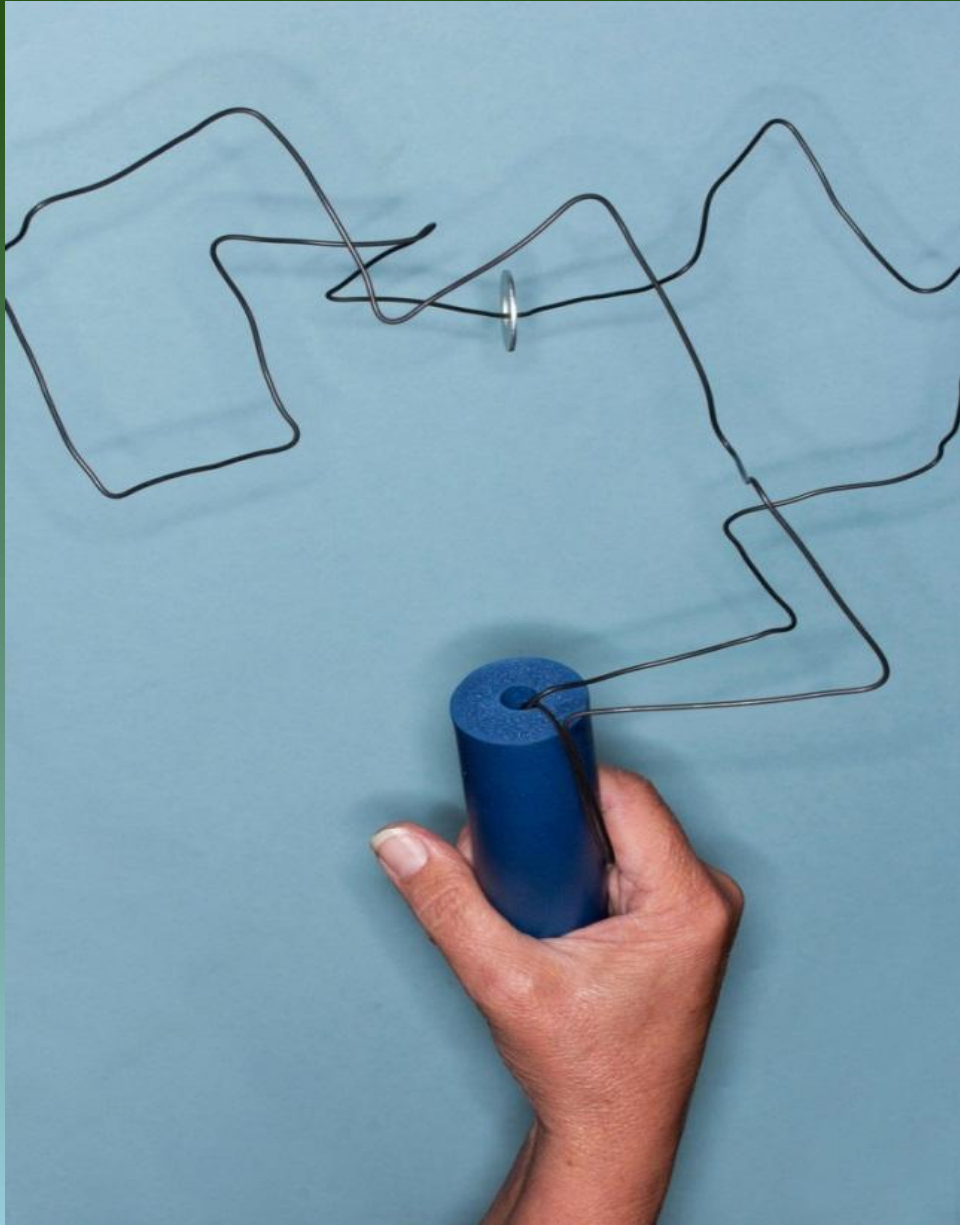
Reuse & Repurpose

- Paper before it is recycled
- Reuse of scraps
- using items the patient already has at home for intervention
- Having clothing exchanges or donating scrubs and uniforms to newer less established therapists.

-Paponicolas, et al. (2018) *Jama*

-Bhogal, S., Lalonde, D., & Baratz, M. (2022). Waste Mitigation: A Marriage of Cost Savings and Sustainability. *Operative Techniques in Orthopaedics*

-Rockstrom et al. (2009) A safe operating space for humanity. *Nature*





EDUCATION

- Student Clubs
- Research Projects
- Advocacy
- Teaching
- Capstone Projects

Asaduzzaman, et. al (2022).

Hess, K. Y., & Rihtman, T. (2023).

McKinnon, S. (2024).

Schwerdtle, et al. (2020).

Taff, S. D., et al. (2023).



OT's Role in Climate Change

A Doctoral Capstone Project

Hi there! I'm Taylor Peterson, an OTD student, and I'm excited to invite you to a 1-hour online course as part of my capstone project.

This course introduces you to an emerging trend of sustainability in occupational therapy. Learn to integrate sustainable practices and collaborate with others to lead the way.

If you have any questions/are interested in taking the course, please send me an email!

taylor.peterson@rocky.edu

Inclusion Criteria:

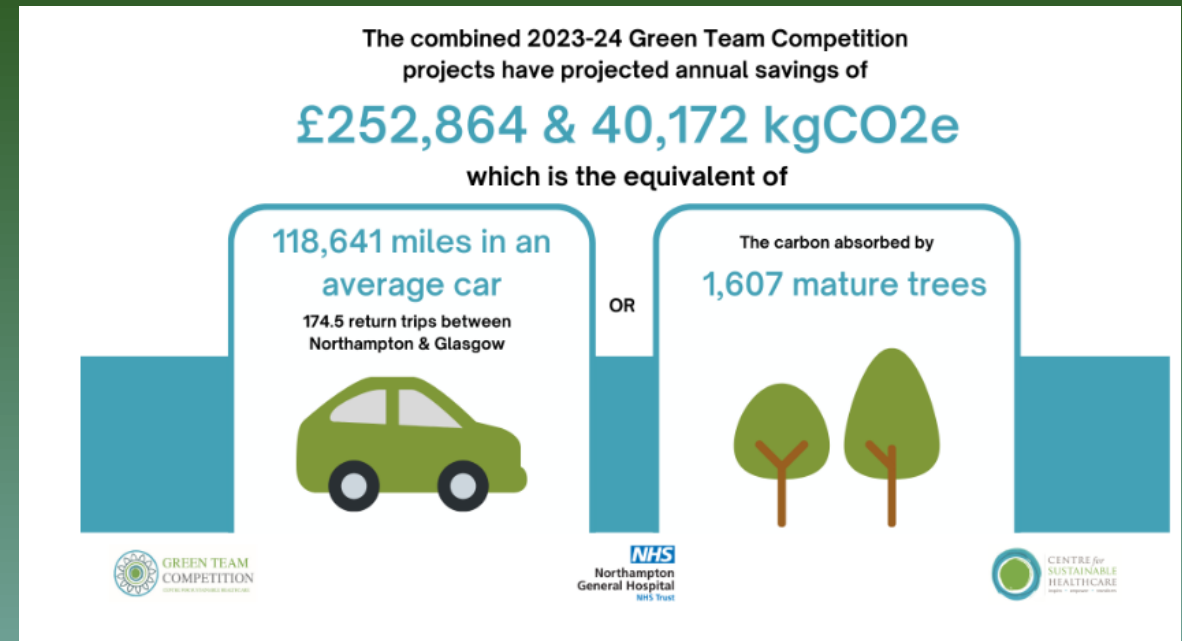
- ✓ Must be an Occupational Therapy Practitioner/Student
- 📶 Must have internet connection
- 🌍 Special interest in integrating sustainability into their OT practice.

TOPICS COVERED IN THIS COURSE



- Moving to less use of paper
- Mindful of where you source from to shorten the supply chain/ emissions and other greenhouse gasses
- Reduce energy-power strip, lightbulbs, travel methods
- Clever scheduling

Reduce



<https://sustainablehealthcare.org.uk/news/2024/03/northampton-general-hospital-nhs-trust-green-team-competition-expected-save-£252864>



“This QI project widened my consideration to how process changes can not only benefit patient care but also have sustainable benefits. I was so surprised and pleased that such small changes could have a big impact. Protecting our environment is very important to me and I am keen to support the NHS on their carbon neutral pledge look forward to our next project!” Lucy Wimmer, Hand Therapy Team Lead

Eco Friendly Products

WoodCast (woodcast.com)



X-Lite (kineticusa.com)





Collaborating

Sustainability:

“meeting the needs of the present without compromising the ability of future generations to meet their own needs”

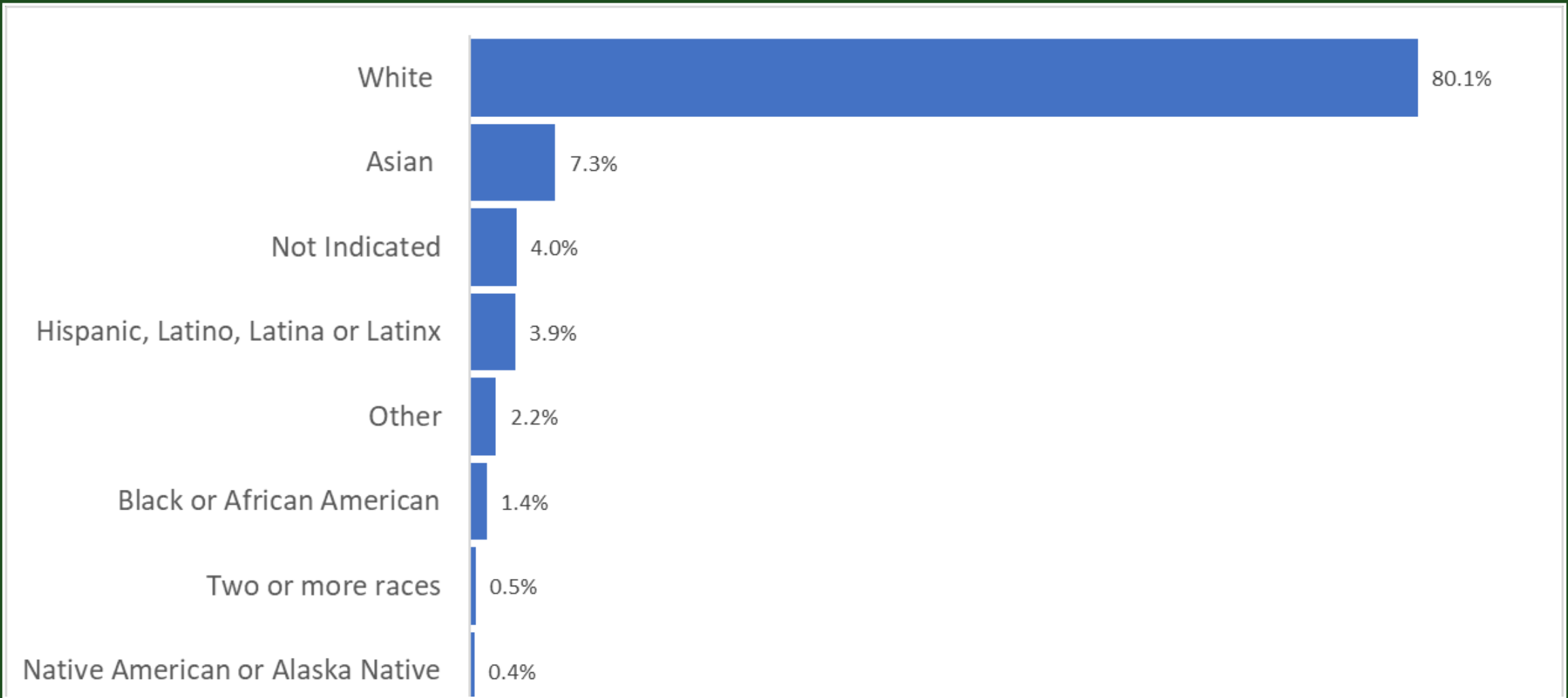
United Nations, 1987 p. 15

“...a balance between human beings and the natural world and to preserve that balance for the benefit of future generations.”

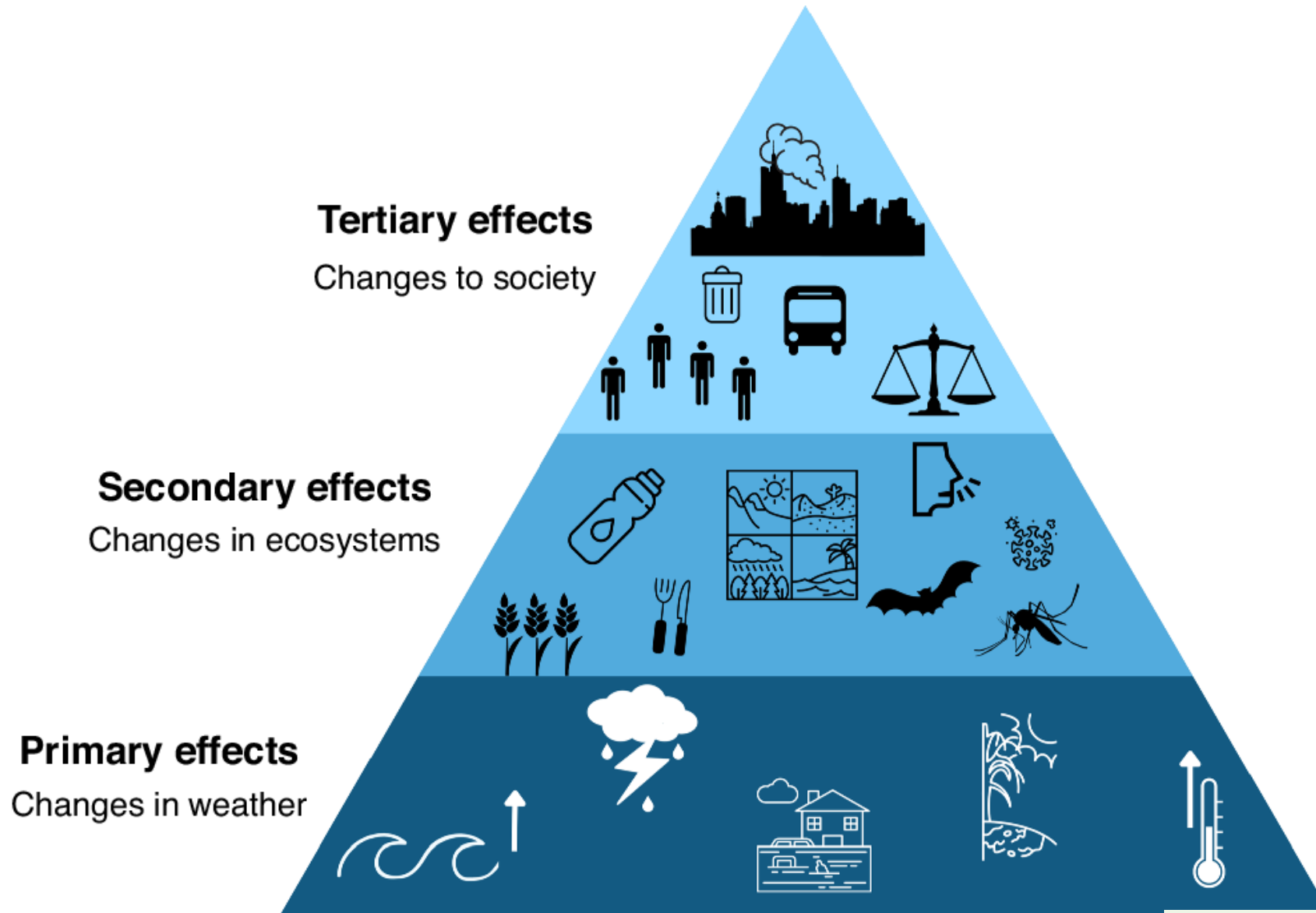
Rebecca Tsosie PhD, (2014) Arizona State University

- **with other healthcare professionals**
- **with professionals outside of healthcare**
- **with our patients**



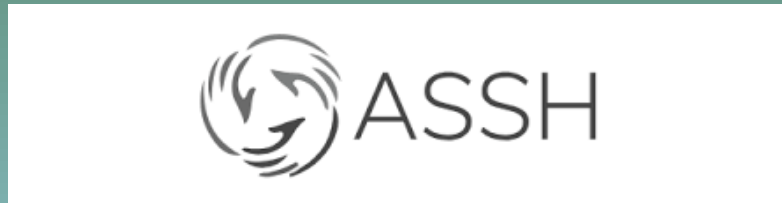


ASHT Demographics 2024





Current ASHT Collaboration



ASHT DEI
COMMITTEE



Sidewalk and Rock Burns from Excessive Heat



Posted July 2, 2024

<https://www.fox10phoenix.com/video/1479721>



Total Confirmed

256

Heat Caused

144

Heat Contributed

112

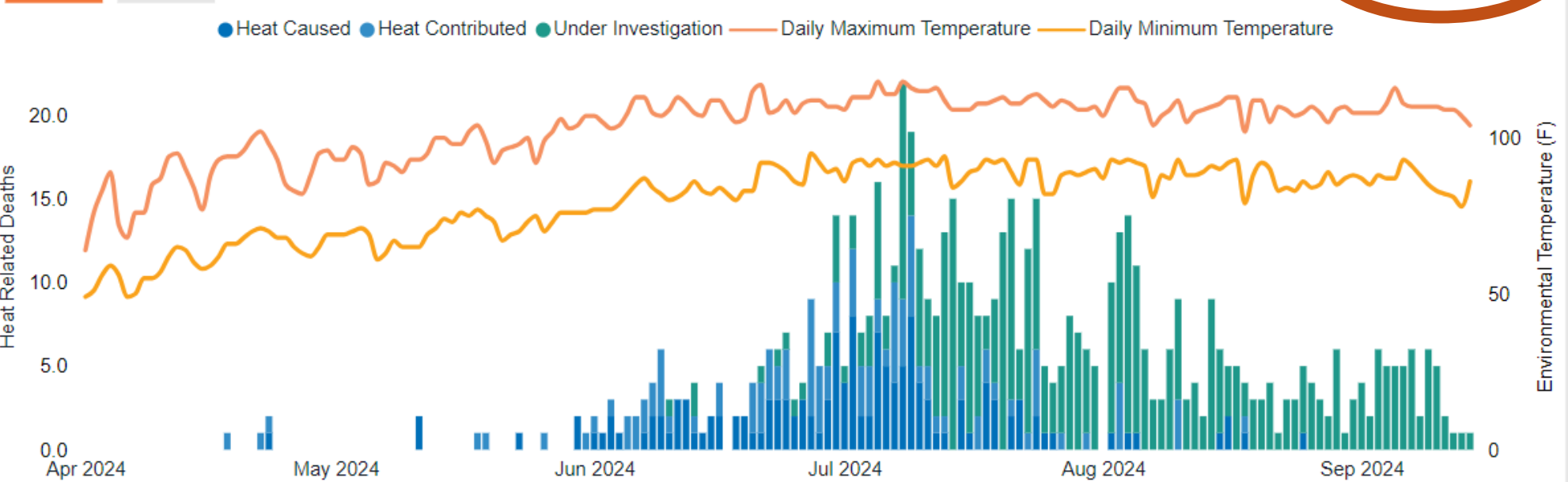
Under Investigation

393

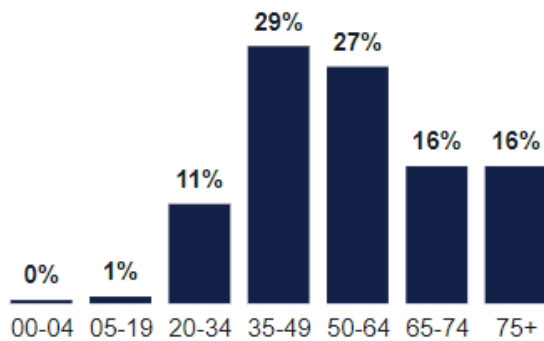
2023 Heat Related Deaths as of Week Range: (09/08 - 09/14)

Total Confirmed: 289
Under Investigation: 424

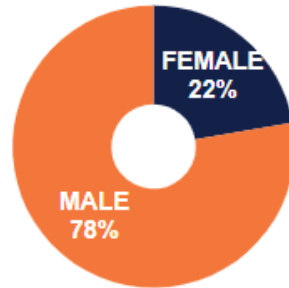
Heat Related Deaths and Environmental Temperature in Maricopa County



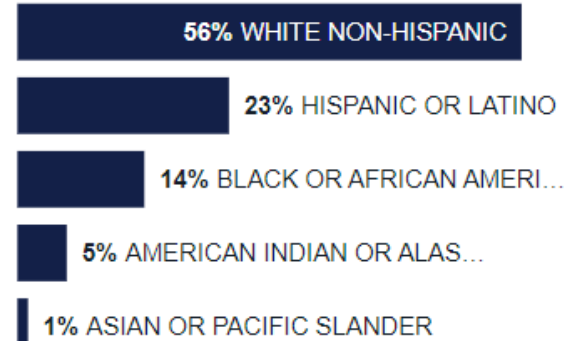
Maricopa County Heat Related Deaths by Age Group



Maricopa County Heat Related Deaths by Sex



Maricopa County Heat Related Deaths by Race and Ethnicity



Alcohol Use

12%

Drug Use

55%

Unhoused

47%



Hand made mats
for unhoused
people
from recycled
plastic bags from
OT student
Sustainability
Club



NPR, taken 2015

In the Hand Clinic

1. Foster Environment of Responsibility
2. Patient Centered Care/ education about sustainability issues
3. Encourage outdoor engagement and use of sustainable transportation.



vgajic/Getty Images in Kronkleton, May 30, 2023

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Innovating

*Shifting the paradigm and redefining health
and wellbeing*

“No problem can be solved from the same consciousness that created it. We have to learn to see the world anew.” Albert Einstein



-loc cit. Banathy, 2013 also
Redvers, et al. 2020.





Diné/Navajo Chinle, AZ

“...reciprocal healing of both nature and humans, which can occur only if our interaction is sustained and respectful.”

Varansi, 2020





The United States Senate - Office of Senator Kyrsten Sinema









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Documentaries /Movies



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