

Climate Change and the Well-Being of People with Disabilities

February 17, 2021

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This session's agenda

- Explore concepts and current research that examine and explain:
 - Mechanisms linking disability and climate change
 - Possible interventions or solutions

“...any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions).”

Centers for Disease Control, 2020

“... results from the interaction between persons with impairments and attitudinal barriers, such as stereotypes, stigma and prejudices, and environmental barriers. That hinders their full and effective participation in society on an equal basis with others.”

Office of the United Nations High Commissioner for Human Rights, 2020

Human Rights Model of Disability

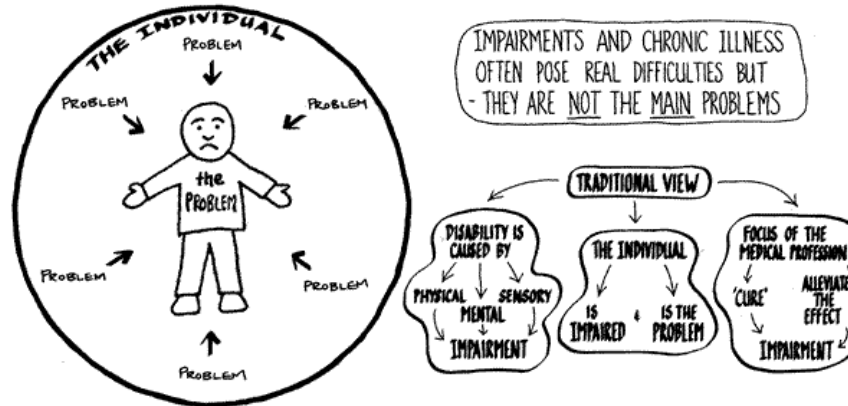
Valentina Della Fina · Rachele Cera
Giuseppe Palmisano *Editors*

The United Nations Convention on the Rights of Persons with Disabilities

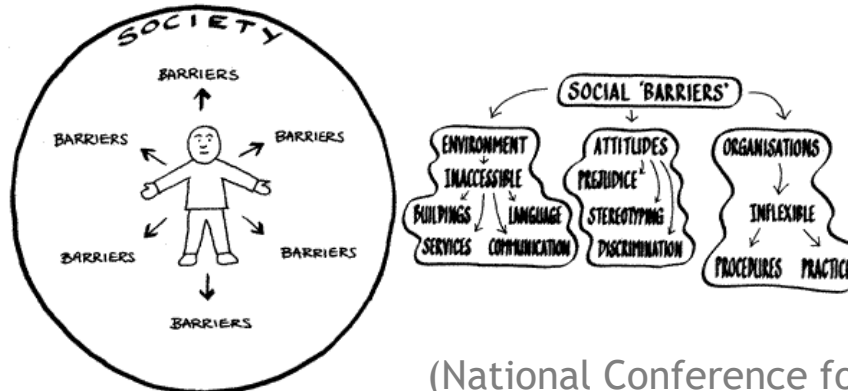
A Commentary

 Springer

THE MEDICAL MODEL OF DISABILITY



THE SOCIAL MODEL OF DISABILITY



(National Conference for
Community and Justice, 2019)

Climate change, and its associated disasters and emergencies, is one of the *most profound environmental barriers* now faced by persons with disabilities.

(Office of the United Nations High Commissioner for Human Rights, 2020)

Core mechanisms:

1) Climate change brings more natural disasters, thus increasing the prevalence of disabling injuries or diseases;

2) Climate change compounds the vulnerability of people with disabilities and the existing health and resource inequalities they face.

(Office of the United Nations High Commissioner for Human Rights, 2020)

Climate change predicts higher prevalence of disabling conditions

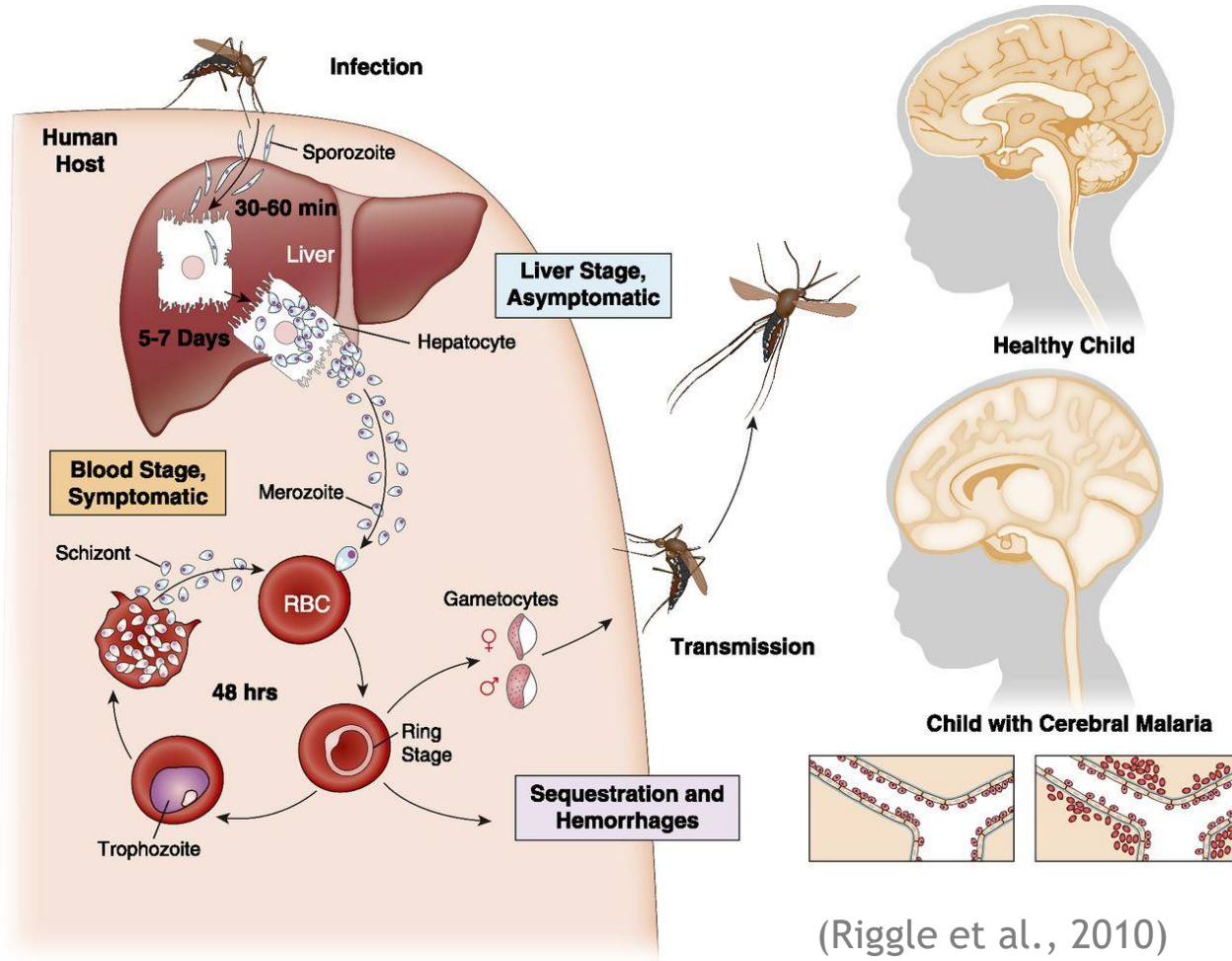
- Greater heat waves, fires;
- Impaired food production → under-nutrition;
- Food- and water-borne diseases

(U.N. Environment Program, Climate Change and Human Rights, 2015)

- World Health organization estimates 250,000 deaths between 2030 and 2050 from malaria, malnutrition, dengue, heat stress, and diarrhea

(Simon Hales et al., 2014)

Climate change predicts higher prevalence of disabling conditions



- 1 in 10 children experience neurological impairment (epilepsy, behavior changes, learning disabilities, motor/coordination/speech problems) after cerebral malaria

(Riggle et al., 2010)

Climate change predicts higher prevalence of disabling conditions

- Climate change disasters linked with higher levels of stress-related psychiatric disability (Padhy et al., 2015)
- Compared to general population, persons with psychiatric disability have over 3 times higher likelihood of death during heat waves (Bouchama et al., 2007)
- Compounded injury or illness for persons with spinal cord injury with abnormal body temperature regulation (Alexander, 2019; Khan et al., 2007)

The Psychosocial Impact of Hurricane Katrina on Persons With Disabilities and Independent Living Center Staff Living on the American Gulf Coast

Michael H. Fox
University of Kansas Medical Center

Glen W. White and Catherine Rooney
University of Kansas

Anthony Cahill
University of New Mexico

Objectives: To determine the impact of Hurricane Katrina on the psychosocial health of people with disabilities and on the ability of people with disabilities in the affected area to live independently. **Participants:** Transcribed conversations were analyzed for 56 survivors of Hurricane Katrina on the American Gulf Coast, all of whom were persons with disabilities or persons working with them. **Method:** Semi-structured interviews were conducted either individually or in focus groups with participants. Qualitative analysis was undertaken using hermeneutic techniques. **Results:** Six major themes emerged: faith, incredulousness, blaming others or oneself, family adaptation and resiliency, and work and professional responsibility. **Conclusions:** The resiliency of persons with disabilities to adapt to disasters can be better understood through factors such as these, providing an effective barometer of social capital that can help societies prepare for future disasters among those most vulnerable.

Keywords: disability, disaster, psychosocial, Hurricane Katrina

As the economic and social costs of natural disasters accumulate, our understanding of the effects of Hurricane Katrina on the social, political, economic and environmental landscape of the North American Gulf Coast continue to be an object of debate (Dewan, 2008; Goodman, 2008; Rodriguez, 2008). Over 3 years after Hurricane Katrina, thousands of storm survivors remained in Federal Emergency Management Agency (FEMA) trailers, even as

sons living in New Orleans were among persons 60 and older, while they accounted for only 15% of the population (Gibson, 2006). It is likely that this ratio is similar if not more pronounced for all persons with disabilities (National Council on Disability [NCD], 2006).

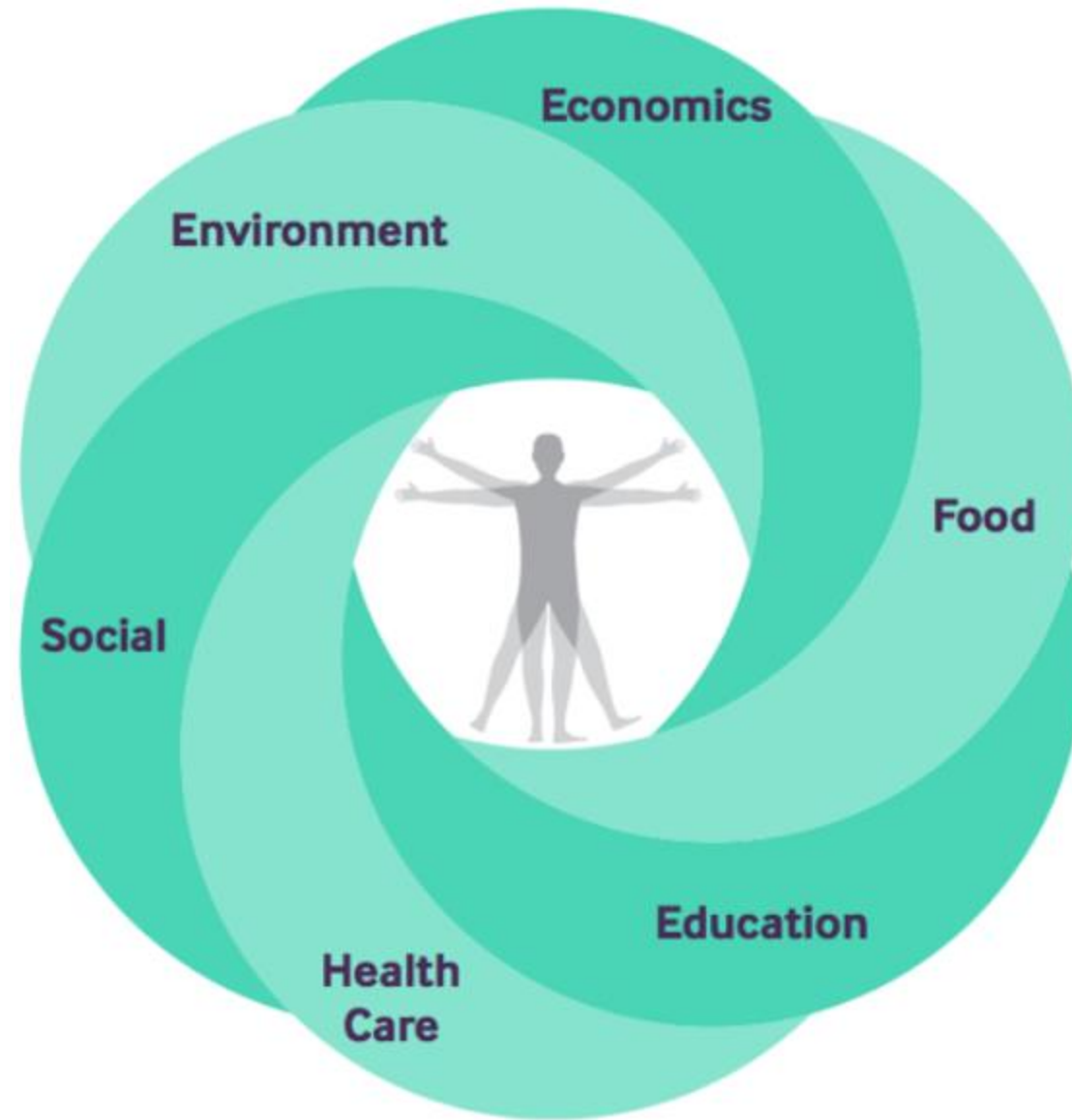
For many, anxiety, insecurity, low self-esteem, social isolation, and lack of control over work and home life became visible

“I turned around and by that time I was out of water. As a quadriplegic, I don’t sweat like normal people and my temperature gauge was broken, so I get overheated and there wasn’t any air that day and I got stuck on a highway with marsh on either side. No trees, no breeze, nothing but the heat. If somebody that I knew from the fire department had not been volunteering to help out, I probably would have died that day from heat stroke.

I started feeling better and they iced me up and sent me back to my friends and family. So, I got sick then and terribly ill with the infection that I got because of the wheelchair and having to live with it I wound up with what’s called a void, where the bone rubs on the muscle tissue and the muscle tissue doesn’t spring back like normal people and it gets infected and then the infection tries to eat its way out of the body and you wind up with these huge wounds that take a lot longer than the average to heal up after surgery. I’m going to finally get my skin flap this March the 30th and I’ll get out of bed and be released, to go back and try to find a home probably in the middle of May.”

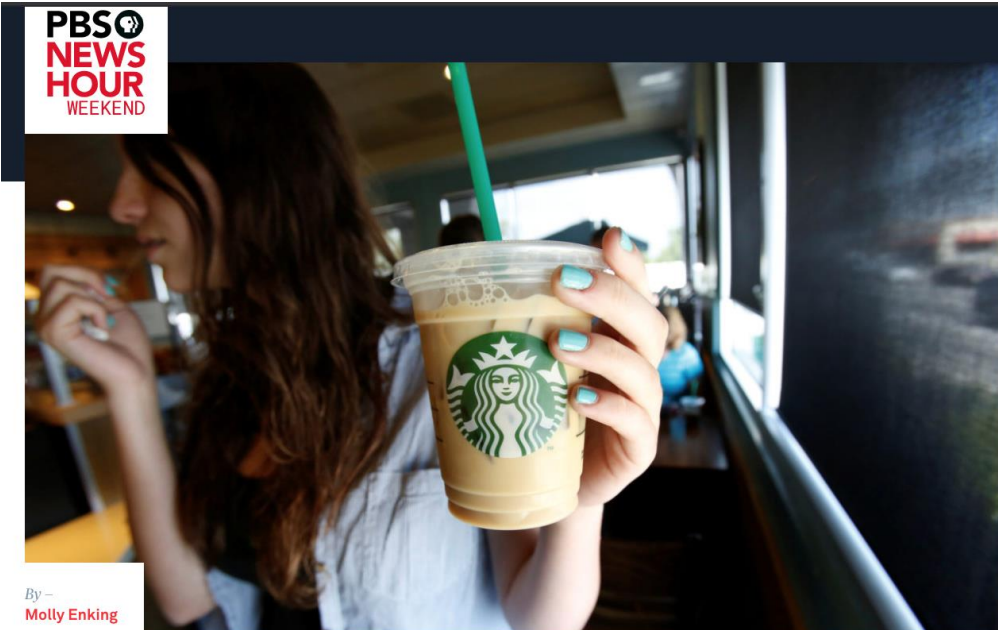
(Fox et al., 2010)

Conceptual Model of Social Determinants of Health



NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Climate change compounds existing vulnerabilities and inequalities



PBS NEWS HOUR WEEKEND

By **Molly Enking**

69 comments

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Disability rights groups voice issues with Starbucks' plastic straw ban as company responds

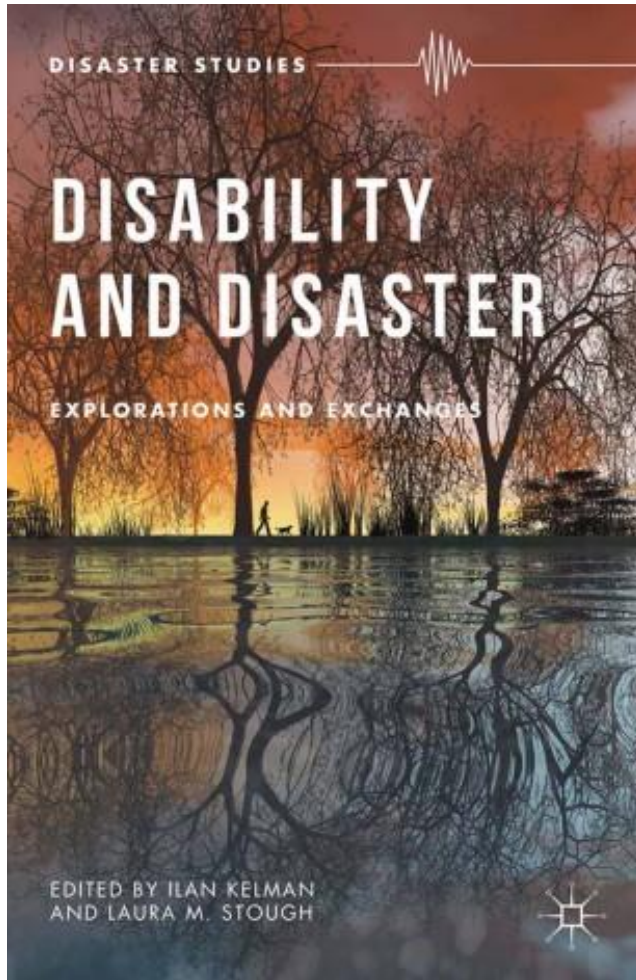
Climate change compounds existing vulnerabilities and inequalities



(Photo: Brendan Smialowski/AFP/Getty Images)
(Perry, 2017)

Climate change compounds existing vulnerabilities and inequalities

The Water is Rushing In



“The following narrative comes from the transcript of a statement by Marcie Roth given on June 15, 2010 before the US House of Representatives Subcommittee on Emergency Communications, Preparedness, and Response. In her statement, Ms. Roth recounted the experiences of Benilda Caixeta during the days following Hurricane Katrina. Benilda Caixeta’s story transfixed US Representatives and other government officials and, sadly, served as an appalling illustration of how the nation’s lack of disaster planning for the needs of people with disabilities brought about deadly consequences. Ms. Roth retold the story of Benilda Caixeta in public venues numerous times as an example of the importance of changing laws, policies, and practices used in the emergency management field in the US. Benilda Caixeta’s experiences also personally and professionally galvanized Ms. Roth to become a nationally recognized expert on the needs of people with disabilities in disaster.” (Roth, 2015)

The New York Times

Behind the Photo of the Older Women in Waist-High Water in Texas



(New York Times, 2017)

Climate change compounds existing vulnerabilities and inequalities

Elaine M. Howle *State Auditor*



December 5, 2019
2019-103

The Governor of California
President pro Tempore of the Senate
Speaker of the Assembly
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

As directed by the Joint Legislative Audit Committee, my office conducted an audit of three counties—Butte, Sonoma, and Ventura—to assess how well prepared each county is to protect vulnerable populations before, during, and after a natural disaster. During a natural disaster, some people have needs—known as *access and functional needs*—that cannot be met by traditional emergency response and recovery methods. These access and functional needs come from a variety of circumstances, such as disabilities, limited English proficiency, transportation disadvantages, and older age. Although everyone is vulnerable during a natural disaster, people with access and functional needs are even more vulnerable. This report concludes that, despite guidance from the Federal Emergency Management Agency (FEMA) and the California Governor’s Office of Emergency Services (Cal OES), these three counties have not adequately implemented best practices for protecting vulnerable populations, which may place their residents at greater risk of harm during future natural disasters.

Climate change compounds existing vulnerabilities and inequalities

People with disabilities comprise one of the most vulnerable groups to climate change:

- Impaired capacity to adapt to changes in the environment
- Exclusion from disaster planning and preparedness

(Wolbring, 2009)

Resilience for individuals and communities in the face of climate change is critically shaped by:

- 1) Natural resources
- 2) Human resources
- 3) Social resources
- 4) Physical resources
- 5) Financial resources

(Care International, 2009)

... and many people with disabilities rely, every day, on numerous complex systems:

- 1) Health maintenance (medicine, electricity, medical care)
- 2) Ability to move in and through physical areas
- 3) Effective communication access
- 4) “Program access”

... but societal structures tend to position people with disabilities, at baseline, as resource-deprived.

THE AMERICANS WITH DISABILITY ACT AT 25

Why Disability And Poverty Still Go Hand In Hand 25 Years After Landmark

Law

July 23, 2015
Heard on All



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Disability and education: The longest road to inclusion

Hazel Bines, Philippa Lei*

World Vision UK, Opal Drive, Fox Milne, Milton

'Out of Place', 'Knowing One's Place': space, power and the exclusion of disabled people

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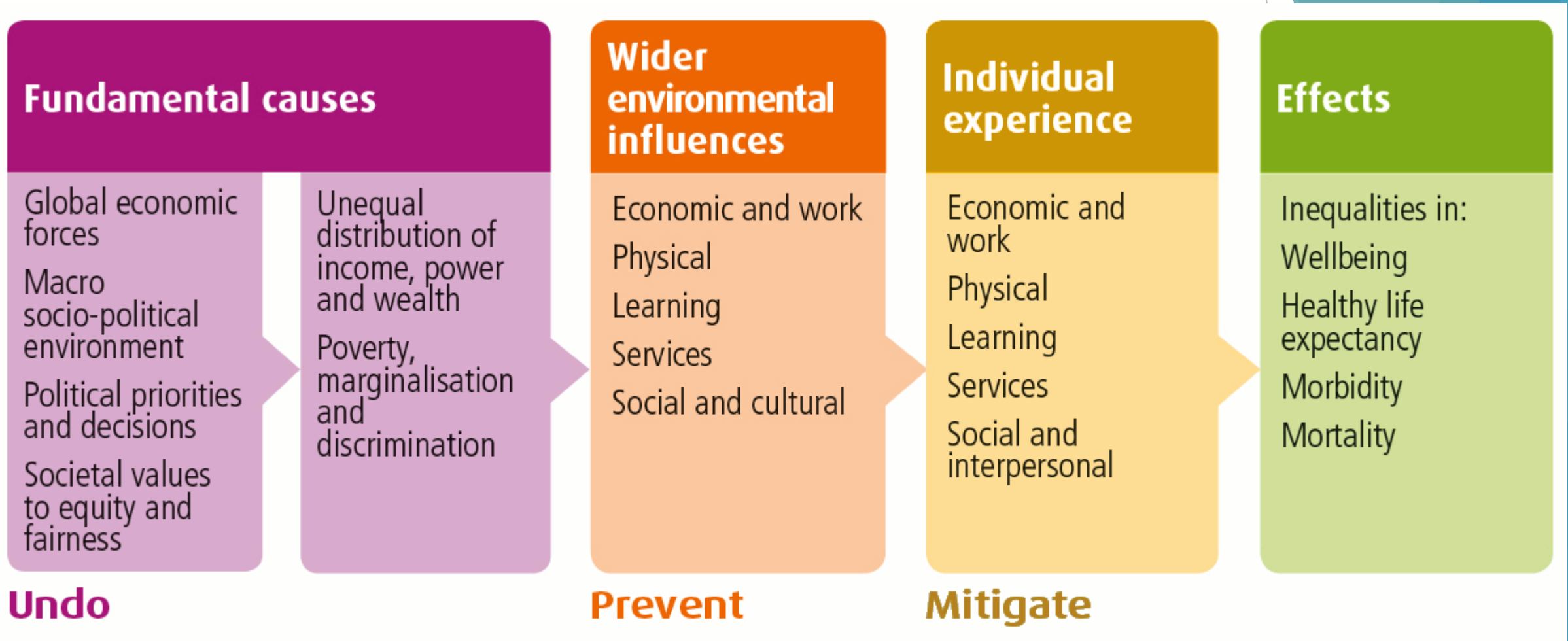
Keywords:
Disability
Inclusion
Education



Key Solutions:

“Working for climate justice requires challenging the root causes of vulnerability, rather than treating disabled people as the inevitable casualties of climate change. It also means interrogating the realities that keep some of us farther from the storm.” (Watts Belser, 2019)

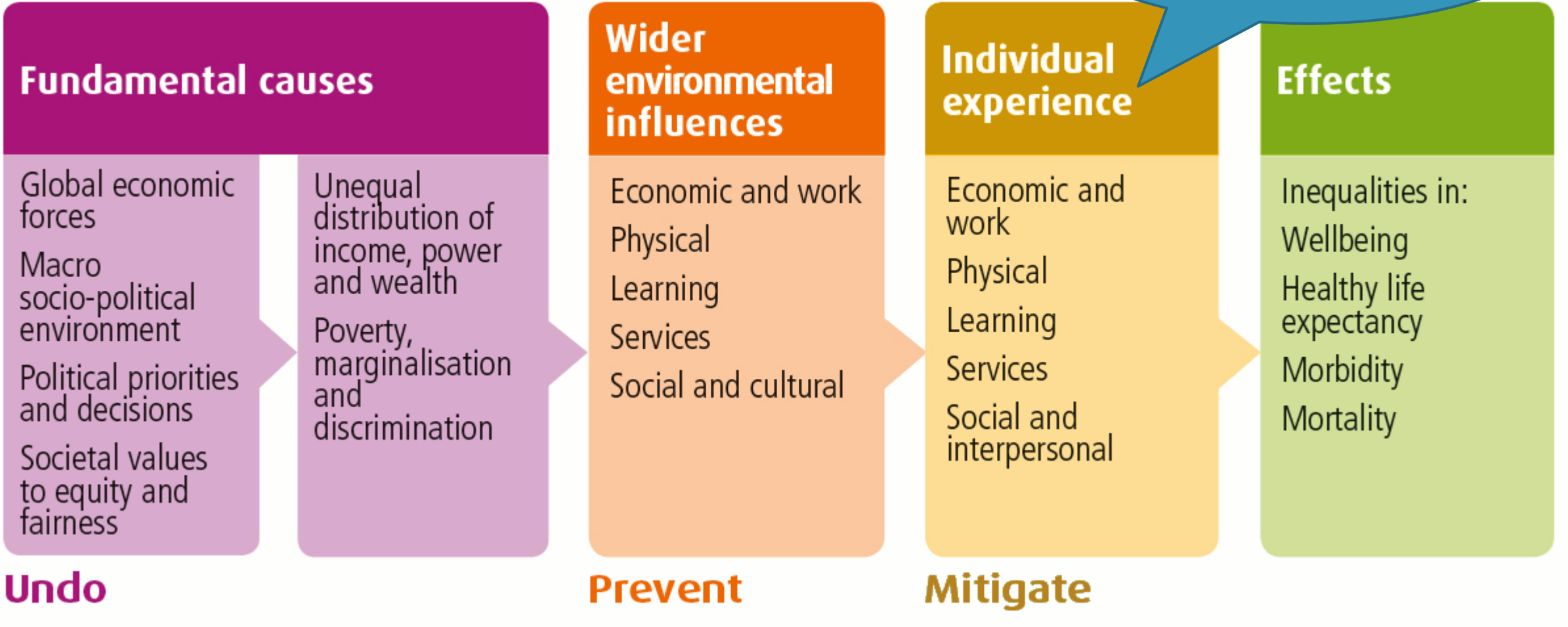
Key Solutions:



From National Health Service, Scotland

Key Solutions:

*Most current social determinants of health and climate justice efforts focus here



From National Health Service, Scotland

Key Solutions:

- Sendai Framework for Disaster Risk Reduction (2015-2030)
- *Inclusive disaster response and climate change solutions benefit everyone, not just persons with disabilities*
- Include people with disabilities in drafting climate change solutions; standards/indicators to ensure inclusion
- Apply accessibility standards to construction and repair of infrastructure (“Build Back Better”)

Key Takeaways:

- 1) Climate change drives up prevalence of disability through both injury and disease
- 2) Climate change also exacerbates existing disabilities and health and resource inequalities through structural ableism and privilege
- 3) Inclusive disaster response benefits everyone; persons with disabilities must be key stakeholders in disaster preparedness and response planning

Thank you!

Questions?

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