

# Climate Change Impacts on Spiritual/Psychological/Psychosocial Resilience

**Building Personal and Psychosocial Resilience to Climate Change**  
**Washington, DC**  
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# Psychological Egoism



Humans are always motivated by self-interest

# What Is the Problem?

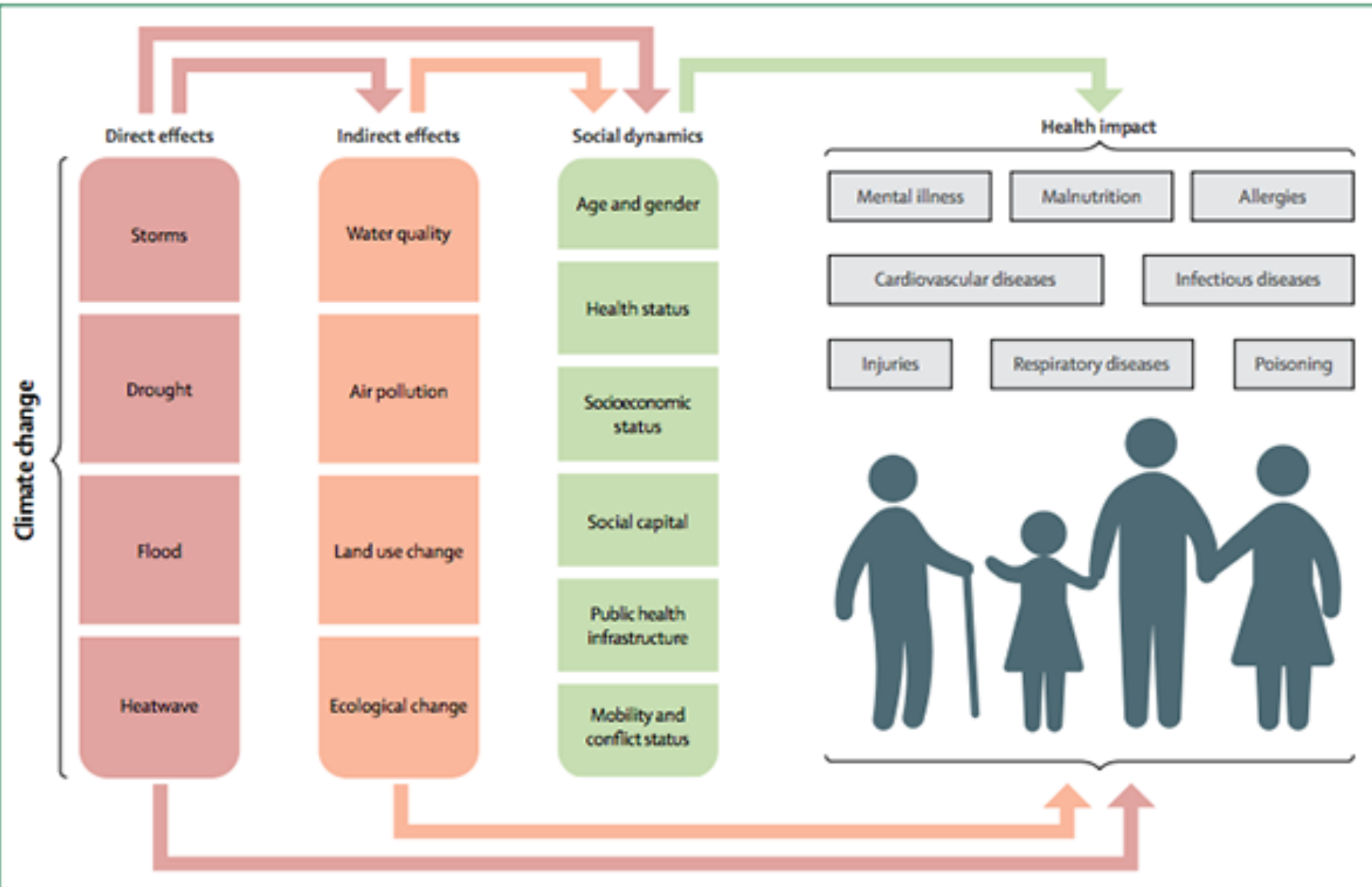
- Left unaddressed, the harmful human mental health and psychosocial reactions to climate change are likely to be as bad as the physical impacts
- Post-trauma treatment is important, but too late, deals mostly with acute traumas, and response systems will never be robust enough

Bob Doppelt  
Executive Director  
The Resource Innovation Group and  
Transformational Resilience Program



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# Climate Change Influences on Health



# Psychological Considerations in Response to Climate Change

A key characteristic of climate change risks is that they are psychologically distant for many people.<sup>1</sup>

- Temporal, social and geographic and uncertain.
  - Lower Psychological distance – higher concern.
  - Various strategies to increase positive actions to climate change by reducing the distance of reality to peoples lives to become more real, local , relevant and immediate via risk communication strategies.
    - Issues related to skepticism and uncertainty. – future events not impacting them directly now.
    - Temporal issues, no direct impact in locale (more distant geographic concerns) and people, future considerations.
    - Skepticism enhances unsustainable actions and cognitive dissonance (i.e., CC is too complex and uncertain to be understood).
    - Uncertainty transfer may occur where a change or greater prominence given to one aspect of CC could lead to similar changes in other aspects of certainty, uncertainty and skepticism when the risk is not well defined and communicated,
    - Relevancy of CC to people in their geographic locales is essential to elicit sustainable behavioral change and preparation.



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<sup>1</sup> Spence, Poortinga, Butler and Pigeon (2011) and Pidgeon. Schools of Psychology at University of Nottingham, Cardiff University.



# Mental Health Impacts of Climate Change



**Psychological effects of climate change are likely to be gradual and cumulative**



**The connection to climate change may not always be clear to those affected**



**Manifests as two types of stress**

**Discrete**

**Continuous**

# CLIMATE CHANGE

```
graph TD; A((Psychological Effects of Extreme Weather Events)) --> B[Research shows that 25-50% of the people impacted by extreme weather events experience:]; B --> C((Psychological Effects of Rising Temperatures)); C --> D[Experimental and correlational research shows a casual relationship between rising heat and:]; D --> E((Increasing Levels of Chronic Toxic Stresses)); E --> F[Climate Change produces Toxic Stresses that can include distress of coping with:]; F --> G((Mounting Levels of Vicarious or Secondary Trauma)); G --> A;
```

## Psychological Effects of Extreme Weather Events

Perception of climate decline are causing rising levels of secondary trauma:

- Moral distress
- Compassion fatigue
- Hopelessness
- Helplessness

Research shows that 25-50% of the people impacted by extreme weather events experience:

- Anxiety                  Depression
- PTSD                      Increased suicides
- Family dysfunction

## Mounting Levels of Vicarious or Secondary Trauma

Climate Change produces Toxic Stresses that can include distress of coping with:

- Long Term Heat waves and droughts
- Emerging and reemerging infectious disease
- Job loss
- Disruption of social networks

## Psychological Effects of Rising Temperatures

Experimental and correlational research shows a casual relationship between rising heat and:

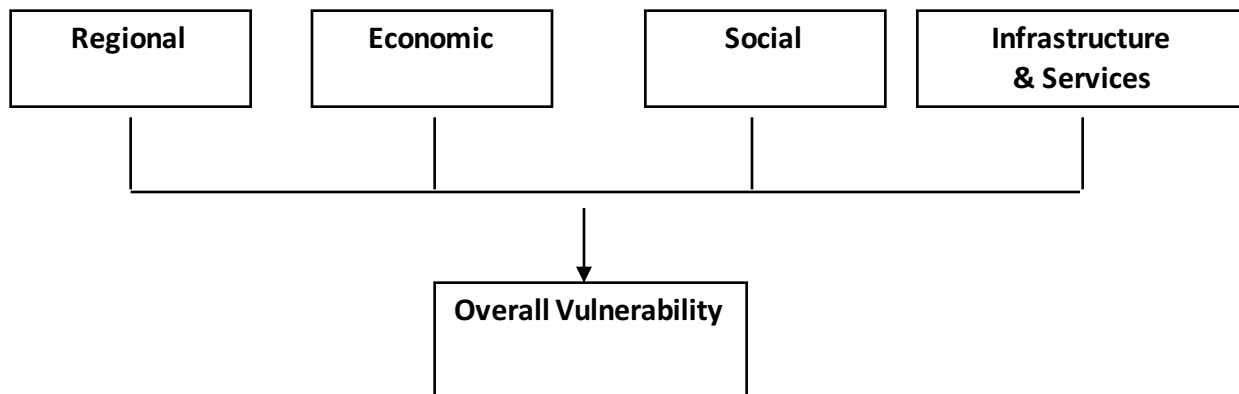
- Increased interpersonal aggression
- Assault
- Rape
- Increased abuse of alcohol and drugs

## Increasing Levels of Chronic Toxic Stresses

# Vulnerability

Degree to which individuals and systems are susceptible to, or unable to cope with, the adverse effects of climate change, including climate variability and extremes

Integration of:



Need to identify and address the vulnerability components individually and together for specific communities



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# Vulnerable Populations

- Chronic medical conditions including mentally ill, clients with special needs
- Socially isolated
- Costal Communities
- Poor & vulnerable communities
- Subsistence Farmers
- Required medical treatments (Dialysis)
- Outdoor workers
- Very young children
- Elderly suffer the greatest effects of heat-waves (impact on mortality greater in women)



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# Vulnerable Populations: Children



Children may understand and experience the threat of climate change very different than their parents or grandparents

Children so troubled by the state of the world that they honestly believe it will come to an end before they get older

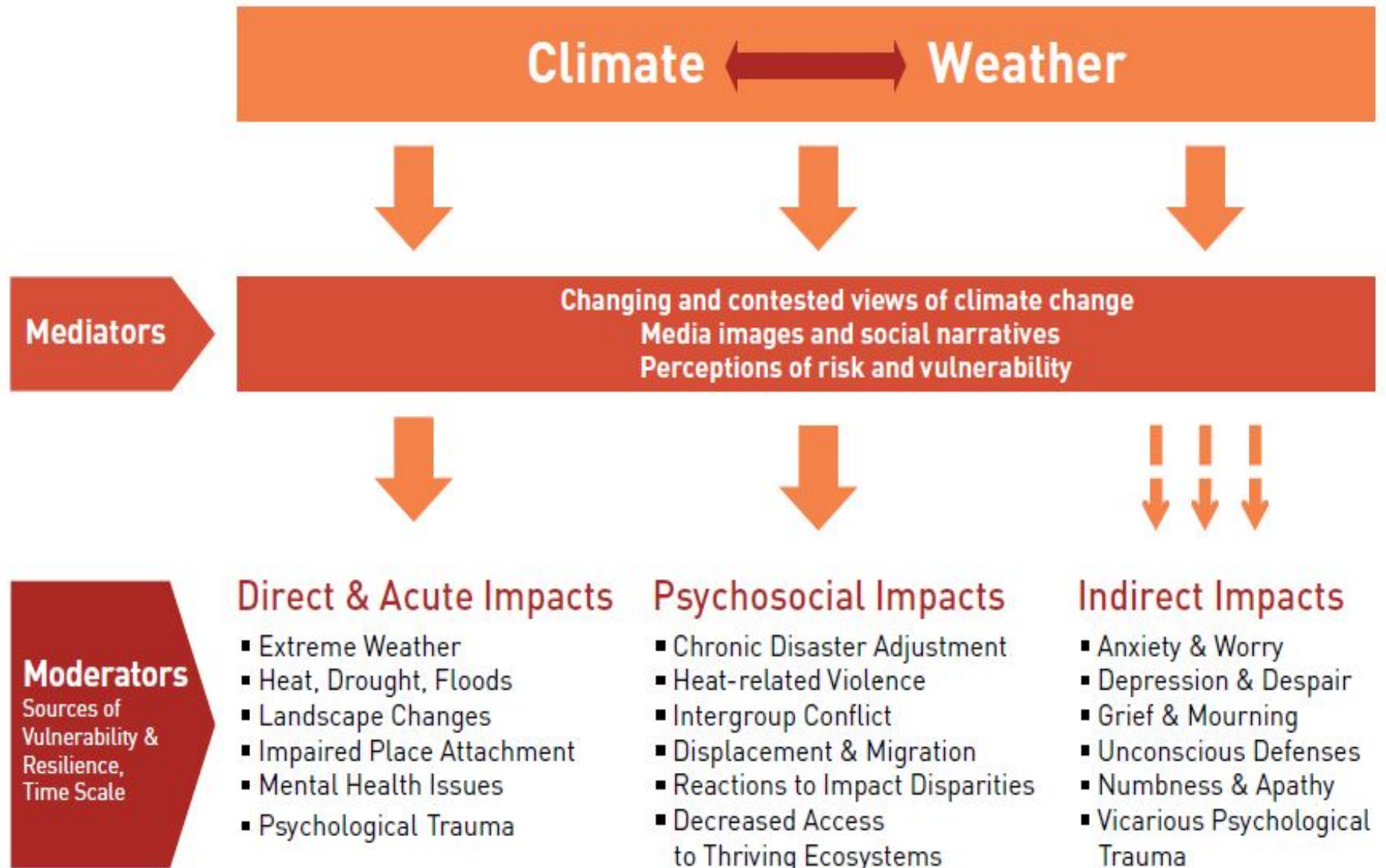
The psychological impact on children has been compared to the impact on children worried about nuclear arms during the Cold War Era

Children are more emotionally vulnerable to increased family violence and the occurrence of natural disasters



Fig. 1

## The psychological impacts of climate change and extreme weather





# Disasters and Mental Health

## Individual Vulnerabilities:

- Proximity to the disaster
- Low socioeconomic status
- Low social connectedness
- Existing mental illness



## Community Vulnerabilities:

- Outdated emergency plans
- Shortage of mental health resources at time of event
- Repeated exposure to disaster or crisis



# Mental Health Impacts of Climate Change

## Personal reactions to the awareness of climate change include:

- Sadness
- Depression
- Anxiety
- Fear
- Helpless and Hopeless
- Anger

## After the Disaster: Mental Health Outcomes are Cumulative:

- Displacement
- Family Illness or Death
- Fractured Social Networks
- PTSD
- Lack of Housing
- Loss of Control Over Life/Confusion
- Loss of Employment
- Loss of Personal Possessions

## Living in Areas Prone to Disaster:

- Cumulative Mental Health Impacts are Associated with the Repeated Exposure to Natural Disaster
- Ongoing uncertainty, anxiety, dread can cause a build up of stress before disaster occurs



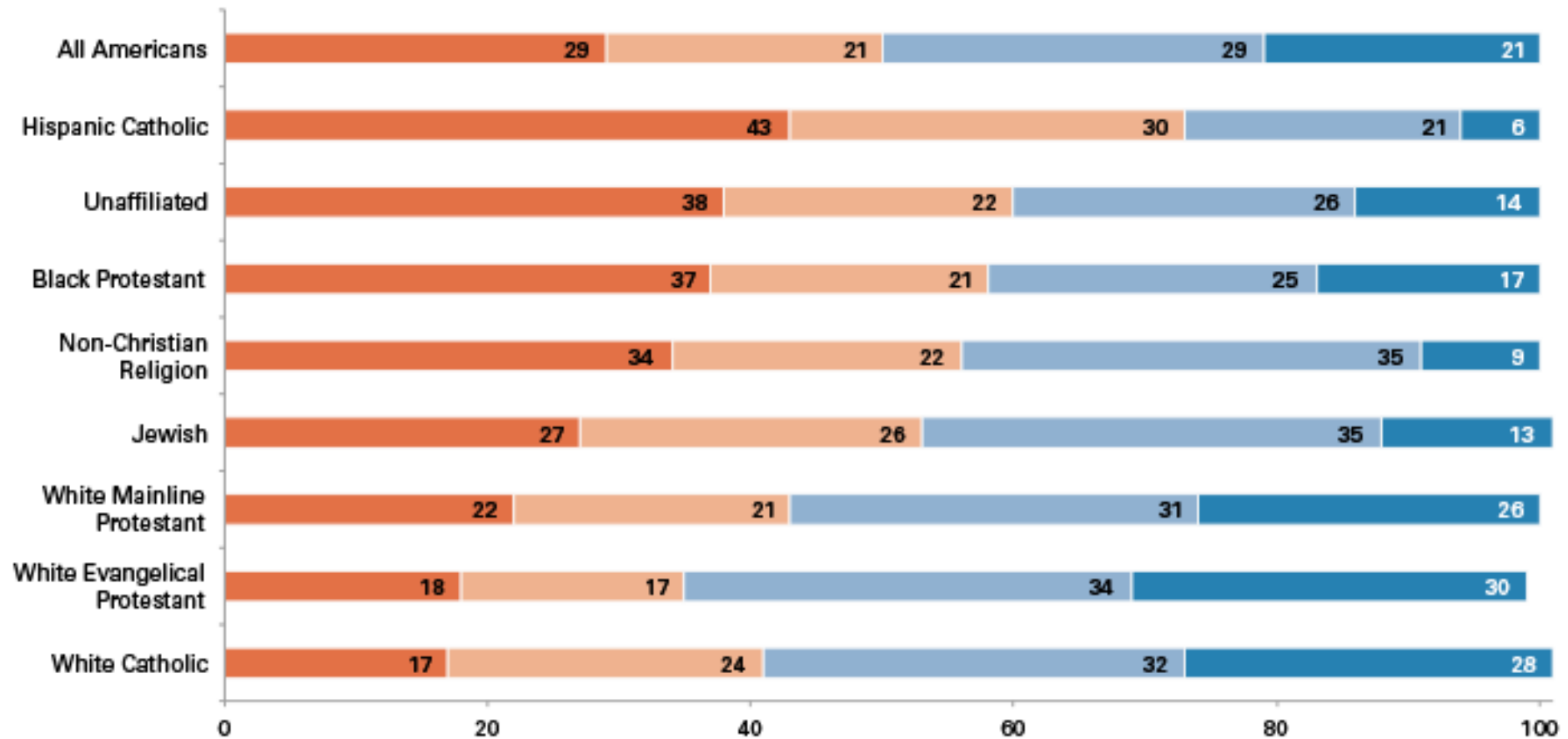
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# Climate Change and Religious Affiliation: What is the Message?

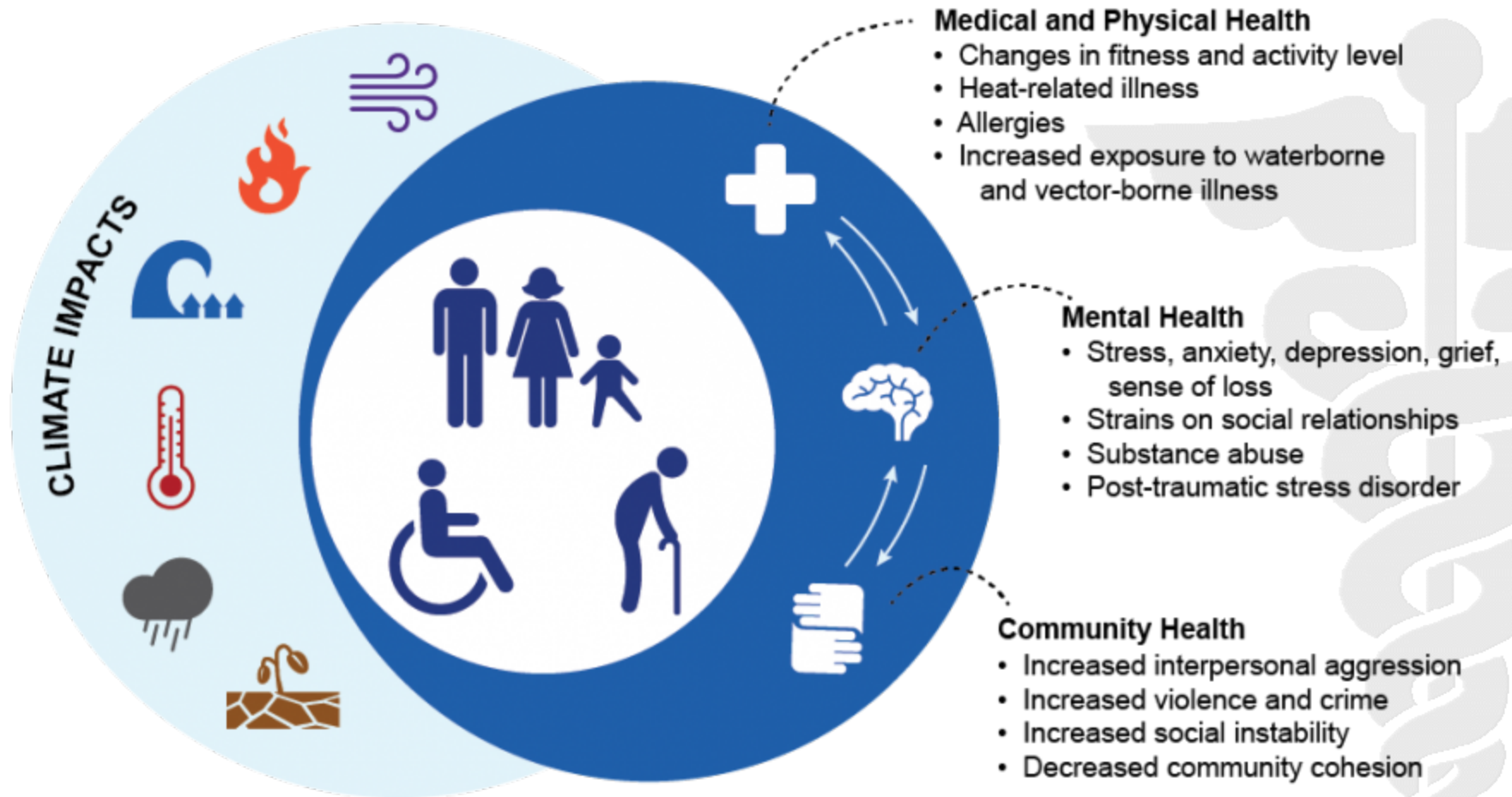
Climate Change Concern Index by Religious Affiliation

Very concerned    Somewhat concerned    Somewhat unconcerned    Very unconcerned



Source: PRRI/AAR, Religion, Values, and Climate Change Survey, November 2014

# Climate Change: Health Effects Continuum



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# Psychological/Psychosocial Impacts of Climate Change



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# Homeland Security

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