Presenter



Susan Clayton, PhD, MS Whitmore-Williams Professor of Psychology The College of Wooster





ecoAmerica start with people

Climate change and mental health: Psychosocial impacts

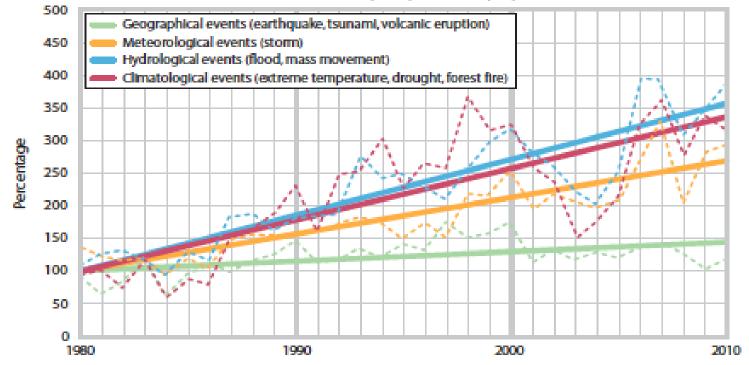
Susan Clayton, the College of Wooster APHA and ecoAmerica webinar series June 23 2016

How can climate change affect psychological well-being?

- + Acute impacts from natural disasters
- + Gradual impacts from changing temperatures, sea levels, and patterns of precipitation
- + Indirect impacts on the ways we think about ourselves, each other, and the world

Natural disasters are on the rise

Natural Catastrophes Worldwide (1980–2010) Number of events (dashed) Relative trends (solid)



Data from D. Guha-Sapir, R. Below, Ph. Hoyots - EM-DAT: International Disaster Database - www.emdat.be - Université Catholique de Louvain - Brussels - Belgium.

Resulting trauma

- + Mental health problems
 - + PTSD
 - + Depression, anxiety
 - + Substance abuse
 - + Suicide and suicidal ideation
- + These effects may be prolonged
- + They may not be prioritized by emergency responders

E.g., Hurricane Katrina

- + 49% developed an anxiety or mood disorder
- 1 in 6 developed
 posttraumatic stress
 disorder
- Suicide and suicidal ideation more than double



Community impacts

- + Domestic abuse
- + Violence and conflict
- Stress of indirect impacts
 Economic insecurity
 Infrastructure problems

Vulnerable populations

- Women, children, the elderly, members of marginalized communities
 - + The elderly are particularly vulnerable to heat
- + Those already suffering from mental illness
 - + Mental health care is often disrupted by disasters
 - Psychotropic medication is a risk factor for heat-related death

Inequality itself is a threat to mental health

+ Risk factors:

- Reduced personal autonomy
- Negative self-perception
- Stress
- Social isolation
- Insecurity

Gradual climate changes



Effects on physical health

+ Infectious diseases, heat waves, ground-level ozone, allergies, nutritional deficiencies

Increased levels of stress

+ Due to

- economic difficulties
- damage to physical and social infrastructure
- environmental degradation

+ All possibly requiring migration

Migration presents a health risk

- Immigrants are more likely to develop psychosis
 - A German report recently described levels approaching 50% for PTSD and depression
- Mental health is worse even among second-generation immigrants
 - showing that it is the social context post-migration and not the pre-migration factors that matter.
- Unlike survivors of discrete traumas, refugees experience stressors that accumulate over the pre-flight, flight, exile, and repatriation periods.

Indirect consequences

+ Perceptions of ourselves, others, and the world we live in



Thinking about ourselves

Diminished sense of *self*loss of occupation
loss of lifestyle and culture
loss of autonomy

Relating to others

- + Stresses on social *relationships*
- + Diminished opportunities for social interaction
- + Disrupted social bonds

Thinking about the world

- "Our gardens have had to die because our house dam has been dry.... It's very depressing because a garden is an oasis...that's all gone, so you've got dust at your back door" (Australian farmer coping with drought)
- "You think your house is permanent... When you lose your house and everything you own, you learn everything is temporary" (Hurricane Sandy survivor)



Solastalgia

Loss of *place* and disruption of place bonds Loss of solace from valued places Loss of security

Promoting resilience

- Most people do recover from trauma
- Post-traumatic growth is possible
- Becoming actively involved in addressing climate change can help people to cope with the stress of worrying about it
- "We learned first-hand that the best way for us to heal from our devastation and loss was to help others recover." (Hurricane Sandy survivor)

Factors associated with resilience

- + Practical support
- + Community ties
- + Sense of optimism
- + Active coping strategies



Components of resilience

- Readiness
 - Educate people about what to expect and how to adapt
- Monitoring
 - Conduct a vulnerability assessment
- Cooperation
 - Establish the social infrastructure to withstand changes and encourage adaptation

Acting on climate change can protect health

- Burning fossil fuels emits pollution that is associated with 4 of the 5 leading causes of death in the U.S.
- Coal-burning plants are also the leading cause of mercury pollution, which affects the brain
- 3.2 million people a year die from factors related to physical inactivity. Choosing to walk or cycle instead of driving can have strong positive health impacts.
- Eating less meat, especially red meat, would reduce risk of heart disease and death while reducing carbon emissions.

Health is not just the absence of disease

+ Climate change presents an *opportunity*

- to examine the social and physical infrastructure of our communities
- to consider opportunities of enhancing well-being

