

Climate Change, Resilience and Mental Health

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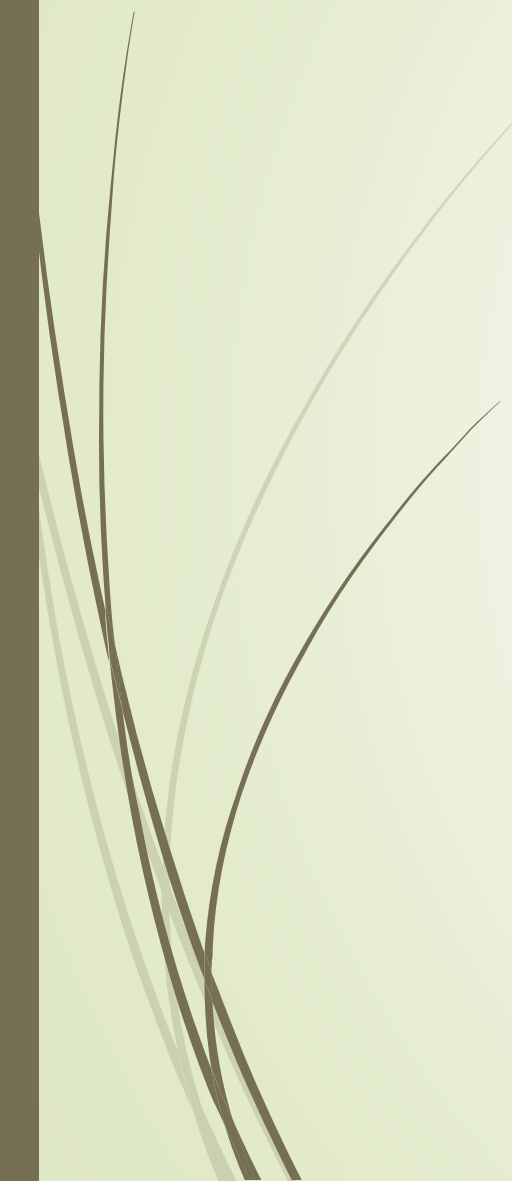
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Why Mental Health?

- Understanding the mental health status helps us to see the personal, social and emotional impacts of urban design and climate change.
 - Understanding mental health impacts can
 - bolster preparation and mitigate some of these impacts
 - provide insights for action by LFCs
 - Suggest ways urban design can make a difference in these impacts
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MENTAL HEALTH
AND
OUR CHANGING
CLIMATE:
IMPACTS,
IMPLICATIONS,
AND GUIDANCE
March 2017
APA and
ecoAmerica

<https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf>



Resilience Requires Preparation

Krygsman, K., Speiser, M., Merse, C., Marx, S., & Tabola, J. (2016). Let's talk health and climate: Communication guidance for health professionals. Washington, D.C.: ecoAmerica and Climate for Health.

- ▶ Our communities' health, infrastructure, and economy are directly connected to our climate, and can be affected both **acutely** and **gradually**
- ▶ We must prepare for these climate conditions both as individuals and communities
- ▶ Preparation and a focus on resilience can help mitigate or at least manage some of the mental health impacts





Climate Change Next Great Public Health Threat

Bourque, F.; Willox, A.C. Climate change: The next challenge for public mental health? *Int. Rev. Psychiat.* 2014, 26, 415–422.

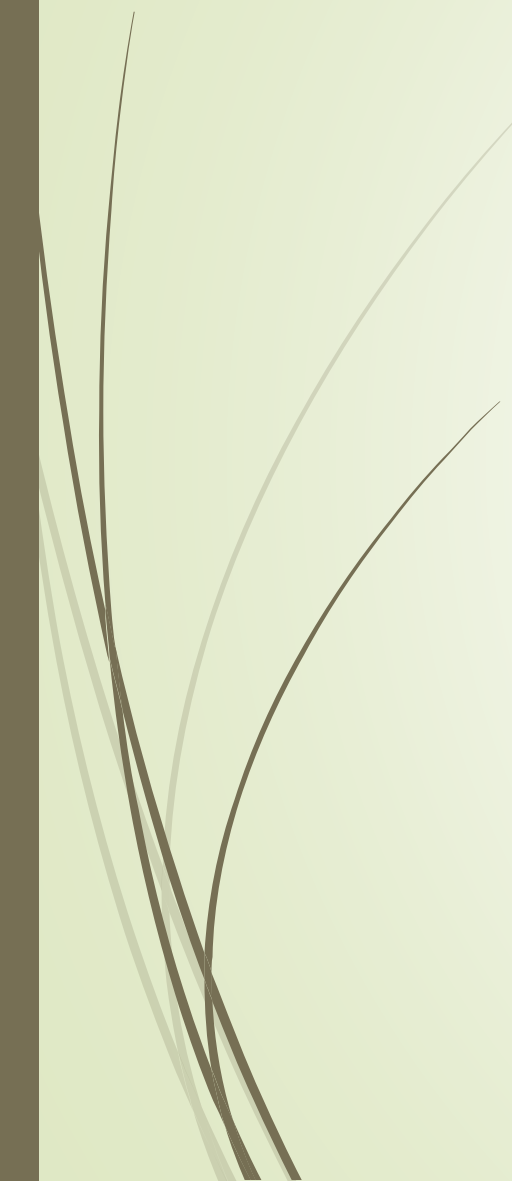
- ▶ Climate change is one of the greatest threats to human health of the 21st century,
- ▶ Climate change can profoundly impact psychological well-being and mental health directly and indirectly
- ▶ Particularly true among those with pre-existing vulnerabilities or those living in ecologically sensitive areas.
- ▶ Mitigation unlikely at this stage, must focus on adaptation


(Bickton, F. M. (2016). Climate change as the biggest threat to public health in southern Africa and measures to reduce its impacts. *Malawi Medical Journal*, 28(2), 70–72.)



Mental Health Impacts of Climate Change


Clayton, S., Manning, C. M., Krygman, K., & Speiser, M. (2017). *Mental Health and Our Changing Climate: Impacts, Implications, and Guidance*. Washington, D.C.: American Psychological Association, and ecoAmerica.

- In general, communities will see rises in stress, depression, anxiety, and related behavior.
 - Psychological responses to climate change include avoidance, fatalism, fear, helplessness, resignation.
 - Disruptions will strain social and community relationships, increasing aggression, violence, and crime.
 - Children & communities with few resources to deal with impacts are especially at risk
 - Denial and avoidance can prevent us from addressing the core causes and solutions for our changing climate, and from building resiliency.
- 



Besides individual impacts, climate change can impact how people interact within communities

- Break down in social cohesion
 - When under threat, people focus on self interest over community interest
- Increased aggression, shown in rates of abuse, family and marital conflict, and homicide
- Increased stress and anxiety can reduce social cohesion
- Competition for resources can increase intergroup violence
- Scapegoating of marginalized groups



Impact of Community Disruption Greater for Poor, Marginalized and Certain Vulnerable Groups

- ▶ People with higher socio-economic status less dependent on community as a resource. Typically look to own resources
- ▶ Poor and marginalized look more to community as a resource, so loss of community is a greater loss and has greater impact
- ▶ Marginalized groups more likely living in vulnerable areas, experience impact sooner and longer
 - ▶ Experience greater climate related stress and anxiety (Hanigan et al., 2012)
- ▶ Certain fields of work are more directly exposed to the impact of climate change (first responders, construction workers, health care workers, trade workers, farmers, transportation, fisherman) and experience greater impacts (Benedek, Fullerton, & Ursano, 2007).

Climate Change and Well-Being

Chapin, F. S., III, Trainor, S. F., Cochran, P., Huntington, H., Markon, C., McCammon, M., Serreze, M. (2014). Alaska. In M. Melillo, T. C. Richmond, & G. W. Yohe (Eds.), *Climate change impacts in the United States: The third national climate assessment* (pp. 514–536). Washington, D.C.: U.S. Global Change Research Program.

- ▶ Indigenous communities can show us what climate change does to communities
- ▶ Study of Inuit ...
 - ▶ strong emotional reactions,
 - ▶ increased drug and alcohol usage,
 - ▶ reduced self-efficacy and self-regulation,
 - ▶ amplification of existing stressors.
- ▶ Indigenous communities are at risk of losing their cultural heritage, as well as their homes



Climate Change will Displace Significant Numbers of People

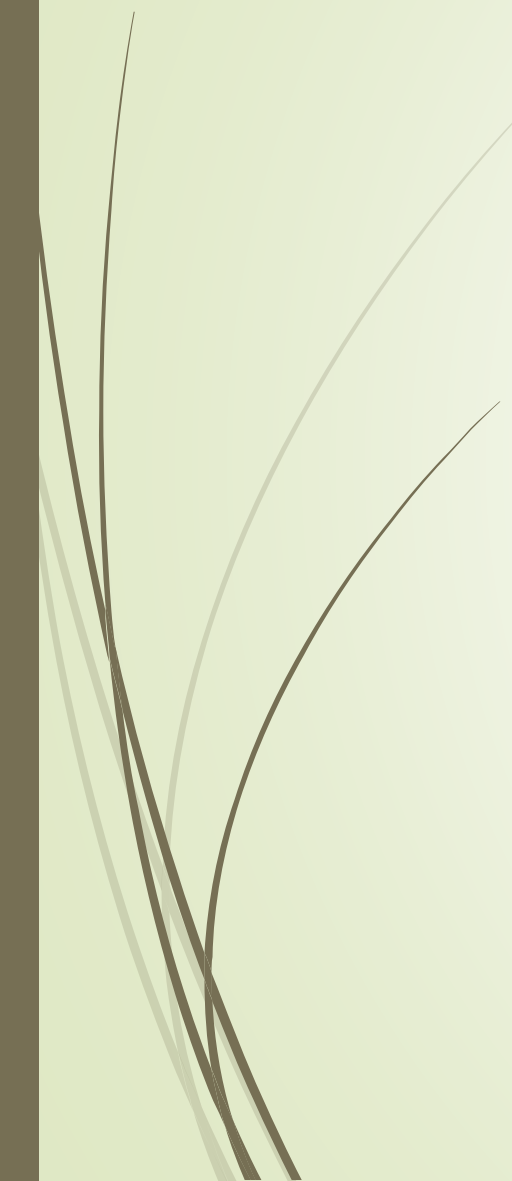
- Recently, EPA predicts sea levels will rise up to 7' Current preparations in US assume a 2' rise
- Significant numbers of people will be displaced from low lying coastal regions.
- This will have significant social consequences





A New Disorder: Chronic Disaster Syndrome

ADAMS, V., VAN HATTUM, T., & ENGLISH, D. (2009). Chronic disaster syndrome: Displacement, disaster capitalism, and the eviction of the poor from New Orleans. *American Ethnologist*, 36(4), 615–636. <http://doi.org/10.1111/j.1548-1425.2009.01199.x>

- Nexus of three problems
 - Long term effects of trauma from near loss of life, plus loss of economic, family, marital and other stability
 - Long term displacement of the most vulnerable as a solution that actually compounds the problem
 - Long term exposure to life situations that repeat trauma, exploitation, and marginalization
- 



There is a river 2 ½ miles away. Children make trips twice a day to get water.

2000 Kenyans displaced after the riots 2007 elections. There is no water, schools, or medical services.

As situation becomes more desperate, suicide rate is rising





Mitigating Actions and Design

- Building resilience can mitigate some of the social impacts
- Resilience can be built on an individual, family, and community level
- Design can help as ...
 - mitigation role
 - supporting resilience
 - mental health support role



Community Design and Social Cohesion

- ▶ Study compared people of similar high wealth living in wealthy compound versus diverse community
- ▶ During economic downturn, people in compound decreased support to others while people in diverse community increased support
- ▶ Must interpret cautiously, this is an apples to oranges comparison, but still instructive
- ▶ Implications –
 - ▶ Counter gentrification
 - ▶ Emphasize diversity
 - ▶ Create spaces for community interaction



Mental Health and Urban Design

- Access to greenery and nature
 - Support community interaction, reduce community barriers
 - Embed neighborhoods in urban areas
 - Reduce crime risk
 - Build social capital through increased social access, reduce isolation*
 - Type of dwelling associated with depression (i.e. more isolated, less outdoor access)
- *Araya, et al (2006) Perceptions of social capital and the built environment and mental health Social Science & Medicine 62 (12)



Community Resilience Actions

- Assess and build capacity for community mental health
- Consider urban designs that foster social connections and cohesion
- Build community preparedness by training people to serve during acute disaster phases
- Increase education concerning climate change and disaster preparedness
- Reduce disparities and vulnerability, with special attention to high risk populations
- Develop trusted warning systems
- Engage community members in long term planning
- It is not just about the design, but also how we go about designing



Individual Resilience Actions

- ▶ Increase preparedness
- ▶ Build social networks
- ▶ Foster individual preparedness
 - ▶ Builds confidence in personal coping
- ▶ Reduce fear through information, exercises, and confidence building strategies
 - ▶ When people start to panic they make poor decisions
- ▶ People who coped poorly in the past likely to cope poorly again
 - ▶ People injured in disasters more vulnerable to future injury



Resilience as Engaging People to Take Action

- ▶ Study of people who lived through a major earthquake in China found that those with a prior bad experience more likely to be injured
- ▶ People with a plan they had confidence in less likely to panic and just react badly
- ▶ Denying the potential consequences of climate change is one of the worst things that can happen to a community
 - ▶ Being ill prepared will aggravate negative reactions



Faith Communities

- All of these resilience building activities are opportunities for local faith communities to engage with their communities
- In addition to the activities listed, LFCs can also ...
 - Build social and spiritual capital
 - Play prophetic role, confront climate change denial
 - Advocate for the marginalized and vulnerable



Should the New Urban Agenda be Revised to more Clearly Address these Threats?

- ▶ The New Urban Agenda should be reviewed in the light of climate change
 - ▶ While resilience is mentioned, capacity to absorb people displaced from other areas is not mentioned, nor is recovery from catastrophic impacts
 - ▶ NUA not clearly tied to climate change accords nor does it mention climate change outcomes
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