

WEATHERING THE STORM

Assessing the relationship between climate change and health inequity.

INTRODUCTION

Though many of the problems plaguing modern society may seem independent due to their sheer magnitude, a closer look reveals them to be intimately connected. Take rising temperatures, ballooning healthcare costs, and limited medical access as a singular example – while each of these phenomena is unique, the causal relationship between them exacerbates each of their worst impacts on society and the individuals within it. Considering how climate change is directly linked to a marked increase in natural disasters, this, in turn, often displaces or otherwise burdens the citizens of a particular area, the most impacted of whom are routinely without the ability to meet the demands of the present crisis. In this Trexin Insight Paper, we examine a few of the intersections between the climate crisis and health inequities.

CLIMATE CHANGE & SOCIOECONOMIC BIAS

Climate change has had a direct effect on those who live in low-income and minority populations of the US. The sea level changes resulting from climate change have an especially disparate effect on certain groups.¹ “Racially segregated and economically disadvantaged communities within these areas face disproportionate challenges to combating sea level rise and maintaining safe, affordable housing.”² Some of these challenges include behavioral issues (stress, anxiety, depression, substance abuse, etc.), adverse economic impacts, and increased social instability. These communities are simply less equipped to recover or endure the potential effects of climate change and rising sea levels than those in more fortunate socioeconomic situations.

Not only are there disadvantages when it comes to sea level changes; there are also disproportionate effects when it comes to natural disasters such as heat waves, droughts, wildfires, storms, and hurricanes.³ According to the Environmental Protection Agency (EPA), “racial and ethnic minorities were most likely to live in areas with the highest projected increases in morbidity and mortality due to climate related changes in temperatures and air pollution... they were more likely to lose labor hours and opportunities due to increases in high-temperature days... they were also the most likely to live in areas with projected land loss due to sea level change, as well as live in coastal areas with the highest projected increases in traffic delays due to high-tide flooding.”⁴ As sea levels rise and national disasters remain increasingly common, these populations will continue to suffer as they are unable to adjust to the changing environment as easily as other factions of the population.

ECO-ANXIETY & MENTAL HEALTH

The American Psychological Association (APA) defines eco-anxiety as “a chronic fear of environmental doom.”⁵ This relatively recent phenomenon has become more prevalent as younger generations have become increasingly concerned about the prospects of our planet and life as we know it. According to a 2021 global study in which 10,000 children and

¹ <https://environment-review.yale.edu/sea-level-rise-calls-resilient-affordable-housing>

² <https://housingmatters.urban.org/articles/rising-sea-levels-are-threatening-affordable-housing-what-can-local-governments-do#:~:text=Coastal%20communities%20are%20already%20at%20risk&text=A%20study%20found%20that%20%E2%80%9Ctwo,lack%20the%20resources%20to%20rebuild.%E2%80%9D>

³ <https://www.samhsa.gov/climate-change-health-equity>

⁴ <https://www.kff.org/racial-equity-and-health-policy/issue-brief/climate-change-and-health-equity-key-questions-and-answers/>

⁵ https://www.cdc.gov/nceizid/dvbd/pdf/Brochure_National_Framework_VBDs-P.pdf

young people (aged 16–25 years) were surveyed, 59% stated that they felt either “very” or “extremely” worried⁶ about the effects of climate change, and that number increased to 84% including those who were at least “moderately” worried. These intense feelings of helplessness and emotional distress can quickly compound to overwhelming levels, resulting in withdrawal, isolation, depression, substance abuse, strained relationships, and fatalism.⁷

From a Health Equity perspective, historically marginalized and socially stratified (by race, gender, class, etc.) individuals are more likely to be exposed to the negative effects of climate change. Members of underserved communities routinely experience disproportionate access to shelter, transportation, clean water, nutritious food, affordable insurance, social support systems, and health resources many others take for granted. By weakening social stability and eroding community cohesion, the myriad effects of climate change can take a serious toll on those already vulnerable and at risk.

INFECTIOUS DISEASE

In addition to the previously listed adverse effects of climate change on humans, such environmental change will likewise negatively impact our bodily wellbeing. One way this may occur is through increased transmissibility and disease transmission rates. According to the Centers for Disease Control and Prevention (CDC), “the annual number of vector-borne disease cases in people [such as those arising from tick and mosquito bites] reported to CDC doubled from 27,388 cases in 2004 to 53,591 cases in 2018.”⁸ Climate change is the direct source of this increase as it correlates to changes in the environment that are extreme enough to allow these diseases to live longer and their hosts to spread farther.^{9,10}

As infectious diseases spread at an alarming rate, the impact of healthcare inequity will compound in underserved communities who are already the most likely to contract such diseases and the least likely to have access to quality care. According to the Center for American Progress (CAP), “[Climate change] exacerbates health disparities, as the communities that face health inequities are often also those most vulnerable to climate and environmental hazards.”¹¹ The impact of such disparities was recently demonstrated throughout the COVID-19 pandemic. Both domestically and internationally, those within a lower income level were demonstrably more likely to contract COVID while being less capable of affording proper medical care to treat the disease. Through dedicated work by academics and experts these disparities can be reduced and eliminated altogether thereby creating a safer, more equitable world for everyone.

CONCLUSION

The climate crisis and its multifaceted impact on society (and especially vulnerable populations) are deeply connected to contemporary health disparities. While many of us feel emboldened to do our part to help mitigate these disparities, navigating the legal labyrinth enveloping them can be daunting. At Trexin, we see beyond the frame of a single issue to fully understand the breadth of the problem. Our experts have the compassion to tactfully approach these nuances without sacrificing knowledge or experience in the process. Drawing upon deep, collective expertise from a wide variety

⁶ <https://climatechange.chicago.gov/climate-impacts/climate-impacts-human-health#:~:text=Changes%20in%20temperature%2C%20precipitation%2C%20and,occurring%20earlier%20in%20the%20year>

⁷ <https://earth.stanford.edu/news/how-does-climate-change-affect-disease>

⁸ <https://www.americanprogress.org/article/how-the-office-of-climate-change-and-health-equity-can-respond-to-the-health-threats-of-the-climate->

[crisis/#:~:text=Climate%20change%20affects%20the%20social,effects%20vary%20based%20on%20vulnerability.&text=It%20exacerbates%20health%20disparities%2C%20as,to%20climate%20and%20environmental%20hazards](https://www.americanprogress.org/article/how-the-office-of-climate-change-and-health-equity-can-respond-to-the-health-threats-of-the-climate-crisis/#:~:text=Climate%20change%20affects%20the%20social,effects%20vary%20based%20on%20vulnerability.&text=It%20exacerbates%20health%20disparities%2C%20as,to%20climate%20and%20environmental%20hazards)

⁹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7756168>

¹⁰ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9078072>

¹¹ <https://www.isglobal.org/en/-/mental-health-and-the-environment>

of industries and perspectives, Trexin offers a holistic approach to problem solving and accounts for even the most seemingly disparate variables to craft a unique, solution-oriented approach that's tailored to your organization's individualized needs. [Connect with a Trexin Advisor](#) today if you'd like to learn more.



This TIP was written by Kenneth Beymer, Blake Ekblad, and Dylan Azadi. Kenneth, Blake, and Dylan welcome comments and discussion on this topic and can be reached at kenneth.beymer@trexin.com, blake.ekblad@trexin.com, and dylan.azadi@trexin.com.