



Children's
Environmental
Health
Network

Protecting Children from the Harmful Impacts of Climate Change Position Statement

The Children's Environmental Health Network (CEHN) seeks to create safe and healthful environments in which all children can thrive.

CEHN agrees with the scientific consensus that climate change is happening and that it is causing significant impacts on children's health. CEHN calls for urgent and prompt action to mitigate climate change, to respond to the harmful impacts of climate change on children's health, and to protect children, families, and generations to come from future harm.

Climate Change Impacts on Health are Wide Ranging

The science is clear – climate change is occurring, and one of the primary drivers is human activity^{1,2,3,4}. It is also clear that climate change is a serious, present threat to human health, and if left unchecked, will intensify and cause even greater harm in the future⁵. Mitigation and adaptation efforts are urgently needed. Climate change threatens basic life necessities: water, food, air and shelter. Environmental changes such as extreme heat waves, rising sea-levels, changes in precipitation resulting in flooding and droughts, intense hurricanes, and degraded air quality directly and indirectly affect the physical, social, and psychological health of people and the communities in which they live⁶. The health effects of climate change are wide-ranging. Some examples include: increased respiratory and cardiovascular disease; injuries and

¹ Cook J, Nuccitelli D, Green SA, et al. Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environ. Res. Lett.* 2013;8(2):024024

² Walsh JD, Wuebbles D, Hayhoe K, et al. National Climate Assessment. In: Vol Washington, DC: U.S. Global Change Research Program; 2014.

³ U.S. Global Change Research Program. (2013). *Third National Climate Change Report*. Washington, DC

⁴ IPCC. (2014). *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland

⁵ Watts, N. et al 2015. Health and climate change: Policy responses to protect public health. (2015). *Lancet*. [http://dx.doi.org/10.1016/S0140-6736\(15\)60854-6](http://dx.doi.org/10.1016/S0140-6736(15)60854-6)

⁶ Luber, G., K. Knowlton, J. Balbus, H. Frumkin, M. Hayden, J. Hess, M. McGeehin, N. Sheats, L. Backer, C. B. Beard, K. L. Ebi, E. Maibach, R. S. Ostfeld, C. Wiedinmyer, E. Zielinski-Gutiérrez, and L. Ziska, 2014: Ch. 9: Human Health. *Climate Change Impacts in the United States: The Third National Climate Assessment*, J. M. Melillo, Terese (T.C.) Richmond, and G.W. Yohe, Eds., U.S. Global Change Research Program, 220-256. doi:10.7930/JOPN93H5.

premature deaths related to extreme weather events; changes in the prevalence and geographical distribution of food- and water-borne illnesses and other infectious diseases; and threats to mental health⁶. Climate change also poses a threat to global and national security^{7,8,9}.

Populations in the developing world are already facing many of these adverse impacts, and in many cases are bearing the greatest burden. Communities across the United States are also experiencing negative impacts; these impacts vary across regions due to differences in climate and geography.

Children are Especially Vulnerable

Vulnerable populations – communities of color, the poor, the elderly, the sick, women who are pregnant¹⁰ and children – are at greatest risk from the negative health impacts of climate change. The unique susceptibilities and/or poor living conditions that these populations often face, such as limited mobility, unsafe housing, poor air and water quality, and mental health stresses, are worsened by the effects of climate change. Further, these communities often do not have the resources that are needed for prevention, preparation and response, and protection.

Children are especially vulnerable to the adverse health impacts of climate change due to a number of physiological and behavioral factors. Climate change is affecting, and will continue to affect, children's health as: temperatures rise; air quality declines; food quality declines; food and water become scarcer; patterns of climate-sensitive infections change and extreme weather events lead to physical and psychological injury. Moreover, their dependence on caregivers places children at much higher risk of climate-related health burdens than adults¹¹. The majority of the global burden of disease related to climate change is thought to impact children younger than 5 years in both industrialized and developing countries¹².

⁷ Barnett J, Adger WN. Climate change, human security and violent conflict. *Polit. Geogr.* 2007;26(6):639–655.

⁸ Lobell DB, Burke MB, Tebaldi C, Mastrandrea MD, Falcon WP, Naylor RL. Prioritizing climate change adaptation needs for food security in 2030. *Science* 2008;319(5863):607–610.

⁹ Schwartz P, Randall D. An Abrupt Climate Change Scenario and Its Implications for United States National Security. DTIC Document; 2003.

¹⁰ Rylander, C., Oland, J., & Sandanger, T. (2013). Climate change and the potential effects on maternal and pregnancy outcomes: An assessment of the most vulnerable – the mother, fetus, and newborn child. *Global Health Action*, 6. doi:10.3402/gha.v6i0.19538

¹¹ Sheffield, P., & Landrigan, P. (2010). Global Climate Change and Children's Health: Threats and Strategies for Prevention. *Environmental Health Perspectives*, 119, 291-298. <http://dx.doi.org/10.1289/ehp.1002233>

¹² Zhang, Y., P, B., & JE, H. (2007). Climate Change and disability-adjusted life years. *Journal of Environmental Health*, 70(3), 32-36. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/17941401>

CEHN Calls for Urgent and Prompt Action

CEHN's position is that action must be taken now to curb climate change through mitigation, to help communities prepare for the impacts of climate change, and to protect those most vulnerable – especially children – now and in the future.

As the leading voice for children in the Nation's Capital, CEHN supports and calls for:

- Prompt action to mitigate climate change by reducing greenhouse gas emissions, such as carbon dioxide, and to clean up our air
- Inclusion of child-specific vulnerabilities and needs into climate change policies, planning and response
- Building a strong economic case for mitigation by ensuring that the true costs of climate change are considered, including the full individual and societal costs of childhood illness
- Integration of “environmental justice” into climate change planning and adaptation (recognizing that communities already facing health and stability/security issues are at especially high risk from climate change impacts)
- Training of health professionals to understand the health effects of climate change on families and children
- Investments in research to further examine how, and to what extent, children's health is affected by climate change
- Health professionals to include climate change protection and prevention efforts in their work and to educate communities, patients, and government officials about climate change
- Investments in, and implementation of, preventive strategies to protect children from the harmful impacts of climate change such as surveillance and early warning systems
- Continued and increased support for state and local health departments and partners to adapt to the present and future health effects of climate change
- Translating and communicating research to the general public about the effects climate change has on children's health, and empowering them with the knowledge and support to take recommended actions to help mitigate these effects
- Non-health sector policies that offer co-benefits (reduce harmful emissions and promote health) such as clean energy, healthy food production and smart community design
- Collaborations across sectors, and among nongovernmental and governmental entities, to develop comprehensive mitigation and adaptation plans that protect children's health