CLIMATE CHANGE, HEALTH, EQUITY A Physician's Guide

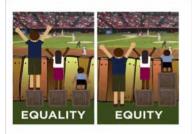
Climate change and health inequities are the greatest global public health challenges of the twentyfirst century.^{1,2} As trusted voices in clinics, communities and policy arenas, physicians play a critical role in addressing these challenges and protecting the public's health in the era of climate change. To facilitate this, the Public Health Institute's Center for Climate Change and Health has partnered with the California Medical Association Foundation Network of Ethnic Physician Organizations and the National Medical Association to train and support a statewide cohort of Climate Change and Health Champions. Physician champions receive training and hands-on support at multiple levels to address climate change and its various health impacts, which are already being experienced by their patients and communities. In particular, the program focuses on the disproportionate impacts that climate change has on low-income communities and communities of color, acting as a "threat multiplier" for existing health inequities.

As part of the project, the Center has developed "A Physician's Guide for Climate Change, Health and Equity," a resource for physicians and other health professionals to strengthen and inform their voices on climate change and health equity. The Guide is full of useful information about the complex and multifaceted connections between climate change and health, and disproportionate burdens on vulnerable populations. It also offers solutions for action at a variety of levels, from patient care to policy advocacy and community action.

The Guide covers a wide variety of topics, beginning with foundational pieces on Climate Change 101, Climate Change and Health Equity, a Physician Action Guide and Physician Surveys on Climate Change and Health. From there, it dives deeper into various climate change and health impacts, such as those from drought, wildfires, extreme heat, air quality and allergens, as well as issues related to food security, mental health and others.

Each of these sections is full of data and examples to help physicians understand the health effects of the particular climate change impact, and, importantly, the way in which climate change acts as a "threat multiplier" for existing health inequities. For example, low-income communities are more likely to live near busy roadways with high pollution exposure. Warmer temperatures from climate change combine with this pollution to worsen asthma and other respiratory conditions, which are already more prevalent among low-income communities.

Gratefully, each topic sheet also includes a myriad of actions solutions physicians can engage in with their patients, communities and policymakers. For example, there is information for advising patients about the effects of extreme heat on certain medications and how they can protect themselves during heat waves. In addition, there are resources to help physicians Linda Rudolph, MD, Catherine Harrison, RN, MPH



advocate for more trees and parks in their communities, especially those that are park poor and at greater risk for the "urban heat island" effect. Bringing more trees and parks into these areas can protect against heat (and flooding), help clean the air

and provide safe spaces for recreation and community-building. Solutions are designed to protect patient and community health, slow climate change and address historical and contemporary inequities that perpetuate health disparities.

There are also several special focus topics in the Guide that examine health impacts of climate change on children, pregnant women and workers as vulnerable populations. The next edition of the Guide (coming in 2017) will expand this section to look at impacts on specific racial and ethnic groups, global contexts and intergenerational equity considerations. It will also include patient education materials.

Lastly, the Guide provides an in-depth look at climate and health co-benefit strategies in four areas: transportation, energy, agriculture and urban greening. Together, action in these areas provides the majority of solutions that are good for climate and good for health. For example, reducing the forty percent of food that is wasted every year in the U.S. would improve food security for many hungry families and reduce greenhouse gas emissions from decaying food in landfills. Likewise, increasing biking and walking (and infrastructure to support it) reduces emissions from vehicles and improves health through physical activity.

While the Guide is an educational resource, its ultimate purpose is for action. Some examples of ways physicians can put it to use include:

• Taking steps to reduce their own carbon footprint, including making their homes and clinics energy-efficient, reducing vehicle use and using transit or active transportation.

• Advising patients on how climate change can affect their health and what they can do to prevent such impacts.

• Advocating for efforts to address and slow climate change in radio, television or newspaper outlets.

• Educating colleagues or their professional organizations about the health impacts of climate change and the disproportionate burden on low-income communities and communities of color.

• Testifying on climate change legislation or otherwise advocating for climate change solutions with elected officials. For more information about the project or "A Physician's Guide to Climate Change, Health and Equity," you can email Catherine.harrison@phi.org or visit http://climatehealthconnect.org/our-work/projects/climate-change-physician-education.



Linda Rudolph, MD, is the Director of the Center for Climate Change and Health at the Public Health Institute. She has been a leader in the implementation of Health in All Policies, and in the integration of climate change into the work of public health agencies. Linda helps to host the U.S. Climate and Health Alliance, and was selected as a White

House Champion of Change for her work on Climate Change and Public Health. She previously worked as the Deputy Director for Chronic Disease Prevention and Health Promotion at the California Department of Public Health, and the Health Officer/Direc-



tor of Public Health for the city of Berkeley. Catherine Harrison, RN, MPH, is a Program Manager for the Center for Climate and Health, leading efforts to increase the physician voice around climate change, its health impacts and co-benefit solutions for climate and health within community, media and policy arenas. In the past she served as

the Public Health Nursing Supervisor at the University of Minnesota Boynton Health Service, the Executive Director of Rural Health Care Initiative in Tikonko, Sierra Leone, and an adult medical-surgical nurse in Denver, Colorado.

References

1. Costello A, Abbas M, Allen A, et al. "Managing the health effects of climate change: Lancet and University College London Institute for Global Health Commission." *Lancet* 2009;373(9676):1693–1733. doi:10.1016/S0140-6736(09)60935-1.

2. World Health Organization Commission on the Social Determinants of Health. "Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health. Final Report of the Commission on Social Determinants of Health." Geneva: World Health Organization (2008).

GETTING INVOLVED

Many physicians believe, now more than ever, that advocacy matters. Here are some medical and public health oriented groups to consider - besides the SFMS and CMA, of course.

American Public Health Association - The largest such professional association, focused on many issues: www.apha.org/become-a-member
Physicians for Social Responsibility - Originally and still focused on nuclear issues, but with a much broader public health focus: www.psr.org
Physicians for Reproductive Health - The leading medical "prochoice" and more association: www.prch.org

• **Collaborative on Health and the Environment** - SFMS's partner in all things related to human health and the environment: www. healthandenvironment.org



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