

Extreme heat is a health crisis, Columbia experts say

February 28 2023, by Isabella O'malley



Credit: CC0 Public Domain

The record-breaking heat Earth endured during the summer of 2022 will be repeated without a robust international effort to address climate change, a panel of scientists warned Monday.

Heat-related deaths, wildfires, [extreme rainfall](#), and persistent drought are expected to become increasingly severe as both ocean and atmospheric temperatures continue to rise, the experts said. Even if all [greenhouse gas emissions](#) ceased today, Earth will continue to warm for several decades.

The presentation, "Earth Series Virtual: Blazing Temperatures, Broken Records," featured a multidisciplinary panel of scientific experts from Columbia University.

Radley Horton, a research professor at Columbia's Lamont-Doherty Earth Observatory, stated that human-induced climate change has caused the global average atmospheric temperature to warm by about 2 degrees (1.1 degrees Celsius) in the last several decades.

"One of the key takeaways is that a little bit of change in global temperature has an enormous impact," said Horton. Some of the main consequences include longer and more intense [heat](#) waves that are hitting increasingly larger areas.

Additionally, Horton said, certain climate models have underestimated just how extreme certain events can be, such as the European heat wave of 2022 and the Pacific Northwest heat wave of 2021.

"We are locked into a lot of additional climate hazards, there is no way around it," said Horton.

Diana Hernandez, Associate Professor of Sociomedical Sciences at the Columbia Mailman School of Public Health, is researching how certain vulnerabilities, such as medical conditions or access to energy, could be affected by changing climate domestically and internationally. The expected impacts include shade inequalities, urban heat islands, and inequitable access to energy-powered [medical devices](#).

"The climate is changing, and we are not adapted to be able to deal with it from a health perspective," said Cecilia Sorensen, a physician and associate professor of Environmental Health Sciences at the Columbia University Medical Center.

Sorensen noted that she and colleagues referred to summer as "trauma season" early in her career, even before she focused on the health impacts of climate change. "We used to get inundated with patients ... people coming in with heart attacks and asthma exacerbations."

Despite the foreboding climate projections, the panelists expressed hope that considerable strides can be made to minimize future climate impacts related to extreme heat.

Hernandez said a community-focused approach, especially with an emphasis on engagement that is inclusive, will be successful in implementing a wide range of [climate](#) adaptation strategies.

Sorenson said one solution that can be implemented by hospitals is developing emergency room protocols to treat a large influx of patients suffering from heat stroke or related conditions during extreme weather. Improved communications are also needed to increase awareness about the medical risks of extreme heat and how impacts can be prevented, she said.

"Within the problem lies the solution," said Sorensen.

© 2023 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Extreme heat is a health crisis, Columbia experts say (2023, February 28) retrieved 24 April 2024 from <https://phys.org/news/2023-02-extreme-health-crisis-columbia-experts.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.