Adapting Health Systems to Protect Children from the Impact of Climate Change: A Series
Remarks from the moderators

The "Re-imagining the Package of Care for Children" series, co-hosted by the Child Health Task Force, Global Communities, and UNICEF, provided a platform to foster important discussions on how to adapt health systems to protect children from the challenges posed by the climate crisis. Through a series of 9 webinars held from November 2022 through October 2023, this discussion series attempted to break down the intersection of climate change and child health, using the "Healthy Environments for Healthy Children" framework as its guiding principle. Beginning with an exploration of the effects of heatwaves on children's health and progressing through sessions addressing topics such as the impact of heat stress on newborn health outcomes, vector-borne diseases, and financing health and climate adaptation, each session offers valuable insights and opportunities for collaboration. With a diverse range of participants representing 119 countries, this series underscores the global significance of mitigating climate-related risks to ensure the health and well-being of children.

- Cara Endyke Doran, Global Communities and Swathi Machikanti, UNICEF
Background

According to the Children’s Climate Risk Index, climate change is already significantly affecting children globally, with approximately 1 billion children at ‘extremely high risk’ of experiencing the negative impacts of climate change. However, while research and literature linking climate change and environmental degradation to ecological and social outcomes has been rapidly proliferating, there is a noticeable lack of data when it comes to the intersection of climate, environment, and health. According to a 2021 WHO review, while documentation of ‘health impacts’ due to climate change is becoming robust, particularly in relation to infectious disease and temperature-related health hazards, many priority topics such as maternal and child health, nutrition, healthcare systems as a whole, and health actions or interventions in response to climate change are poorly documented or published on.

Source: Current Trends, Gaps, and Perspectives for the Future (WHO, 2021)

Therefore, the purpose of the webinar series is to foster greater discussion on under-represented but important child health themes and collaborate across sectors and organizations to advocate successfully for greater global investment in adapting child health systems to become more resilient in the face of greater climate change going forward.

About the series
The Re-imagining the Package of Care for Children subgroup of the Child Health Task Force and UNICEF are co-hosting a webinar series building on the event in May to foster discussion around adapting child health systems to become more resilient in the face of the climate crisis moving forward. Using the Healthy Environments for Healthy Children framework, this series will explore topics at the nexus of climate change and health identified by Task Force members as important to address in order to improve systems supporting maternal, newborn, and child health services.

Objectives of the series
- Raise awareness of the child health-specific health and climate change intersections
- Inform actionable regional guidance for UNICEF
- Shape global standards and definitions
- Inform shared advocacy/fundraising efforts and products
- Build consensus on ways forward and monitoring
- Build capacity of Task Force members to inform climate adaptations to health plans and programs

Summary of Session Topics following HEHC
1. Healthy Environments Healthy Children: Heatwaves and Heatwaves
2. Children's Climate Risk Index
3. Impact of Heat Stress on Newborn Health Outcomes
4. Protecting Children and Pregnant women from Health Stress, Possible Interventions and Recommendations
5. Climate Effects on Malaria Programming for Children
6. Vector-Borne Diseases: Climate and Arboviruses
7. Financing Health and Climate Adaptation
8. Communicating Health and Climate Adaptation
9. How Early Warning Systems Can Improve Climate-Responsive Healthcare Approaches

Session One: Healthy Environments for Healthy Children Framework & the Effects of Heatwaves - November 10, 2022
About: The first session presented an overview of UNICEF's Healthy Environments for Healthy Children framework, shared highlights from UNICEF's newly released report on the impacts of heatwaves on children, and discussed possible interventions that can protect their health.

Speakers:
- Abheet Solomon, Global Programme Lead, Healthy Environments for Healthy Children, UNICEF
Session Two: Sharing and Discussing the Children’s Climate Risk Index - December 13, 2022

About: The second session shared an overview of UNICEF’s Children’s Climate Risk Index (CCRI), a breakdown of its methodology, and opportunities for participants to discuss the risks for children in their own contexts, moving from policy to implementation.

Speakers:
- Nicholas Rees, *East Asia and Pacific Programme Manager, Climate and Environment, UNICEF*
- Swathi Manchikanti, *Lead for Climate Adaptation, Healthy Environments for Healthy Children Programme, UNICEF*

Session Three: Impact of Heat Stress on Newborn Health Outcomes - February 13, 2023

About: In honor of the annual Congenital Heart Disease Awareness Week, this session discussed how heat stress is a worrying contributing factor and what can be done to protect pregnant women and infants against it. Extreme heat has been documented as contributing to congenital health disease, which is already the most common birth defect and increases mortality significantly in the first year of life.

Speakers:
- Dr. Shao Lin, *Professor and Graduate Director, School of Public Health, University at Albany, State University of New York*
- Dr. Shabnam Peyvandi, *Pediatric Cardiologist, Co-Director, Healthy Hearts and Minds Program, University of California San Francisco*
- Dr. Caradee Wright, *Chief Specialist Scientist, Environment and Health Research Unit, South African Medical Research Council*
- Swathi Manchikanti, *Lead for Climate Adaptation, Healthy Environments for Healthy Children Programme, UNICEF*

Guest Moderator:
- Bistra Zheleva, *Vice President of Global Strategy and Advocacy, Children’s HeartLink*

Session Four: Protecting Children and Pregnant Women from Heat Stress, Possible Interventions and Recommendations - March 29, 2023

About: This session built on the evidence from previous heat stress sessions to start exploring what can be done by communities and primary healthcare to mitigate, quickly identify and treat heat-related illnesses.

Speakers:
Dr. Ana Bonell, Medical Research Council Unit, The Gambia at London School of Hygiene and Tropical Medicine, Clinical Fellow

Professor Zulfiqar Bhutta, Aga Khan University & SickKids Centre for Global Child Health, Founding Director AKU Institute for Global Health & Development

Dr. Cecilia Sorensen, Director of the Global Consortium on Climate and Health Education at Columbia University, Associate Professor of Emergency Medicine at Columbia Irving Medical Center

Swathi Manchikanti, Lead for Climate Adaptation, Healthy Environments for Healthy Children Programme, UNICEF

Session Five: Climate Effects on Malaria Programming for Children - May 3, 2023

About: This session focused on how extreme weather events, heat and other climatic variables have affected malaria transmission and programming, using Senegal as a case study.

Speakers:

• Dr. Aboubacar Sadou, MD, DTM&H, MSPH, Resident Advisor, President's Malaria Initiative, USAID/Senegal
• Dr. Radina Soubyanto, PhD, Senior Data Scientist, US President's Malaria Initiative, USAID/DC
• Swathi Manchikanti, Lead for Climate Adaptation, Healthy Environments for Healthy Children Programme, UNICEF

Session Six: Vector-Borne Diseases - Climate and Arboviruses - June 15, 2023

About: This session focused on what arboviruses are, their effects on child and maternal health, how they are being affected by climate change, as well as some ideas for how we can strengthen primary healthcare in response to them.

Speakers:

• Dr. Kleber Giovanni Luz, Pediatrician and Infectious Disease Specialist, Associate Professor IV at Federal University of Rio Grande do Norte, Brazil
• Dr. Sandra Mattos, Pediatric and Fetal Cardiologist, Medical Director of Maternal-Fetal Cardiac Unit at the Royal Portuguese Hospital, President of Heart Circle
• Dr. Jamie Caldwell, Associate Research Scholar, High Meadows Environmental Institute, Princeton University

Session Seven: Financing Health and Climate Adaptation - July 13, 2023

About: This session shared different opportunities to finance programs centered around child health and climate change that are necessary to provide sustainable solutions for communities.

Speakers:

• Regina Bures, Senior Scientific Advisor, Division of Cardiovascular Sciences, National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health (NIH)
• Dr. Rebecca Carter, Adaptation Lead, World Resources Institute

Session Eight: Communicating Health and Climate Adaptation - August 22, 2023
About: This session touched on what makes climate messaging effective, available resources on communicating climate change as it relates to health, and different methods of community engagement in climate action led by health professionals.

Speakers:
- Omnia El Omrani, MD, COP27 President Youth Envoy and Policy Fellow Imperial College London
- Edward Maibach, MPH, PhD, Distinguished University Professor & Director, George Mason University Center for Climate Change Communication
- Liz Purchia, Communications Director, Harvard T.H. Chan School of Public Health, Center for Climate, Health, and the Global Environment

Session Nine: How Early Warning Systems Can Improve Climate-Responsive Healthcare Approaches - October 13, 2023

About: During this session, expert panelists will share tangible examples of how they are supporting the development and use of early warning systems in India and other countries in the region.

Speakers:
- Kaushik Sarkar, Inaugural Director, Institute for Health Modeling and Climate Solutions
- Abhiyant Tiwari, Lead Health & Climate Resilience, Natural Resources Defense Council (NRDC) India

Series Moderators:
- Cara Endyke Doran, Sr. Director, Health, Global Communities, Re-imagining the Package of Care for Children Subgroup co-Chair
- Swathi Machikanti, Lead for Climate Adaptation, Healthy Environments for Healthy Children Programme, UNICEF

Series Organizers:
- Sita Strother, Program Officer, JSI, Child Health Task Force Secretariat
- Janie Morency, Program Coordinator, Child Health Task Force Secretariat

Statistics
- Total Number of Registrants: 2,895
- Total Number of Attendees: 1,006
- Number of countries represented by participants: 119
- Attendance range by session: 45-245 attendees