



### **Climate Change and Health Forum**

#### Session 1: "A Threat to Progress: Confronting the Effects of Climate Change on Child Health and Well-being": A New UNICEF Report August 14, 2024

Hosted by: The Child Health Task Force and Children's Environmental Collaborative



















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# **Climate and Health Forum**

#### **Session 1:**

"A threat to progress: Global stock take on how climate change impacts child health": A New UNICEF Report



Children's Environmental Health Collaborative









Save the Children

THE GLOBAL CLIMATE & HEALTH ALLIANCE





# Phase 2 of Climate Change and Child Health Series

#### **Objectives of the series**

- Build on the past series, "Adapting Health Systems to Protect Children from Climate Change."
- Continue to raise awareness of the child health-specific health and climate change intersections.
- Share program successes, challenges, and innovations across communities, partners, donors, and governments.
- Build the capacity of Task Force members to inform climate adaptations to health plans and programs.

#### **Phase 1 Series Overview**

Session 1: Healthy Environments for Healthy Children (HEHC) Framework Session 2: Children's Climate Risk Index (CCRI) Session 3: The Impact of Climate Change on Newborn Health Outcomes: A Focus on Congenital Heart Defects Session 4: Protecting Children and Pregnant People from Heat Stress Session 5: Climate Effects on Malaria Programming for Children Session 6: Climate Effects on Arboviruses and Child Health Session 7: Financing Health and Climate Adaptation Session 8: Communicating Health Effects of Climate Change Session 9: Early Warning Systems

Link to webinar recordings: <u>Adapting Health Systems to Protect Children</u> from the Impact of Climate Change Series | Child Health Task Force

# **Presenters**



Abheet Solomon Senior Adviser **UNICEF** (co-author)



Dr. Tobias Alfven Professor **Karolinska Institutet** (co-author)



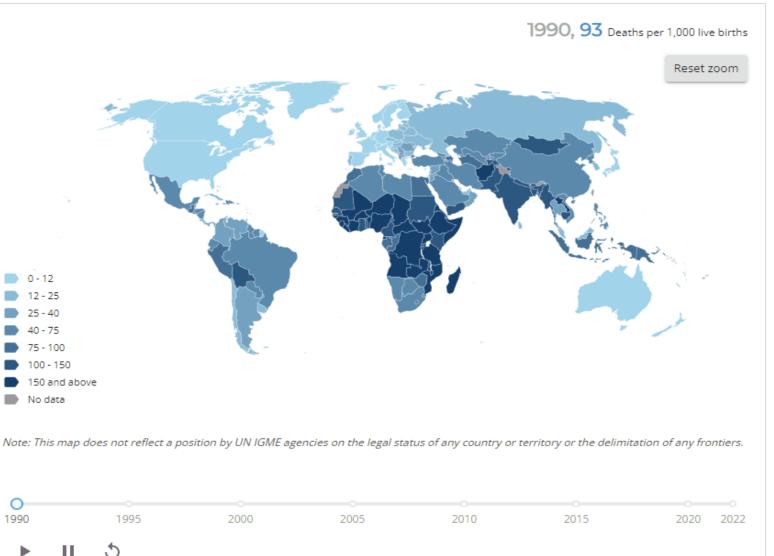
# A threat to progress: Confronting the impact of climate change on child health and well-being

Abheet J. Solomon, UNICEF and Tobias Alfvén, Karolinska Institutet



# The problem: Progress on child survival, health and well-being is under threat

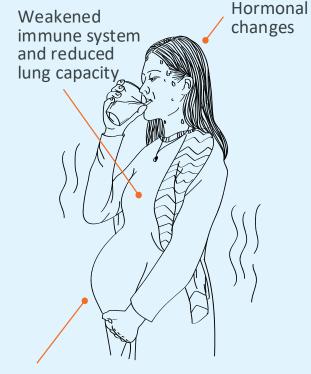
- Children today face multiple overlapping environmental risks! Today, more than a million children under five years die every year due to unhealthy environments.
- <u>Climate change</u> is exposing children to extreme weather events, extreme heat, changing ecosystems, food insecurity and water scarcity.
- <u>Industrialization-related pollution</u> has steadily increased including the use of hazardous chemicals, such as lead, in consumer products.
- <u>Unsafe built environments pose</u> additional risks for children.
- There is no child health without planetary health! A holistic approach to children's environmental health is thus critical.



#### Children are uniquely vulnerable across the life-course

unicef 🔮 for every child

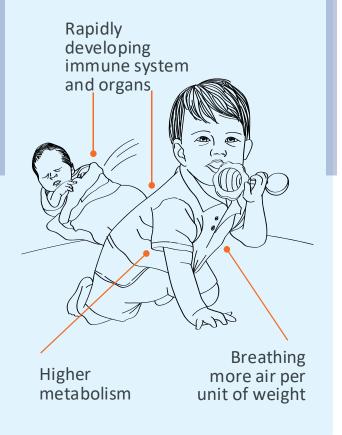


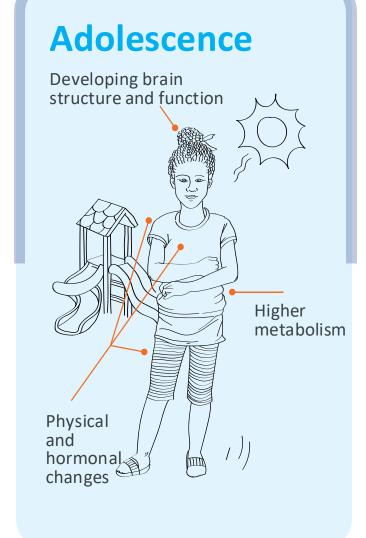


Fetuses can be exposed in utero to physical, biological, and chemical agents



# Infancy and childhood





8

#### Impact of climate change on child survival, health and well-being

#### Hazards

Climate-related hazards with significant impact on children:

- Extreme heat
- Droughts
- Wildfires
- Floods and storms
- Ecosystem changes
- Air pollution

#### **Vulnerabilities**

Inequities and factors that determine the severity of the impact:

- Socio-economic status
- Gender
- Location
- Existing health status
- Country context and capacity
- contaminationFood insecurity and contamination

Water scarcity and

**Multipliers** 

Factors made worse

by climate change:

- Infrastructural
- damage
- Service disruption
- Displacement



#### Impacts

Health outcomes contributing to child mortality and morbidity





Pregnancy complications and adverse birth outcomes

Infectious

diseases

Noncommunicable

diseases

Malnutrition



Injuries



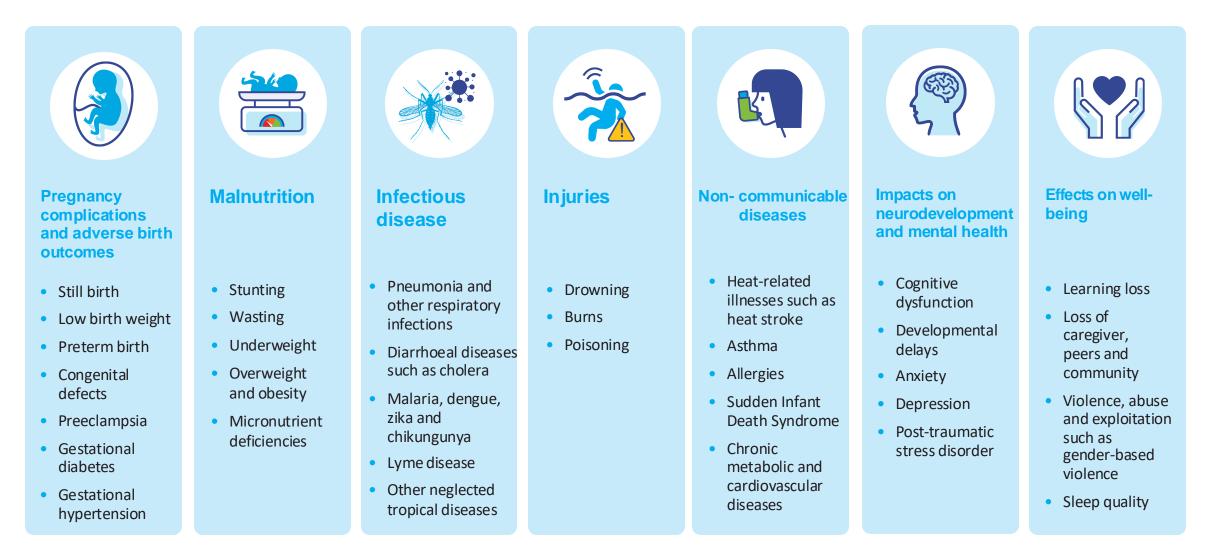
Impacts on neurodevelopment

and mental health



Effects on wellbeing

### The health impact is severe and can last a lifetime



### **Extreme heat**

- Extreme heat can lead to pregnancy complications and adverse birth outcomes, such as preterm birth.
- Beyond direct impacts from heat, higher temperatures are associated with increases in all-cause mortality rates among younger children, and among older children and adolescents extreme heat can lead to poorer cognitive and physical development.
- By 2050 almost every child under 18 in the world nearly 2.2 billion will be exposed to high heatwave frequency, up from only 24 per cent of children in 2020



# Droughts

- Droughts have multiple health impacts and can increase all-cause rates of mortality and morbidity among children, lead to water scarcity and food insecurity that results in increased rates of undernutrition and spread of infectious diseases.
- Similarly to other extreme weather events, living through droughts can have severe implications for mental health among children.
- Climate change will lead to increases in temperature extremes, with droughts becoming more frequent and severe, especially if global warming reaches 2°C or above.



# Wildfires

- Wildfires are prevalent in many regions of the world. In addition to direct physical harm to children, wildfire smoke can lead to adverse pregnancy outcomes and interact negatively with neurodevelopment in children.
- Exposure to wildfire smoke can lead to respiratory diseases and increased susceptibility of respiratory infections in children, while there also exist negative mental health impacts.
- Projections show that there will be a global increase in extreme fires of up to 14 per cent by 2030, and 50 per cent by the end of the century.



## **Floods and storms**

- Floods and storms have been linked to pregnancy complications, adverse birth outcomes and adverse impacts on neurodevelopment that can have longlasting consequences.
- Flooding can lead to increased spread of infectious diseases and exposure to toxicants, while the lived experience of extreme weather events can lead to mental health impacts, such as depression, in children and adolescents.
- Without adaptation and with accelerated climate change, half of the world's population will be exposed to flooding by the end of the century.



# **Air Pollution**

- Particulate matter air pollution and other chemicals related to burning of fossil fuels and dust storms are linked to worsened respiratory capacity in children, such as development and worsening of asthma.
- Allergic and atopic diseases are set to become more prevalent with increased spread of allergens.
- Particulate matter air pollution is a direct by-product of fossil fuel combustion, while a significant amount of air pollution comes from climate change related droughts, wildfires and dust storms that is set to increase.



# **Changing disease patterns**

- Increased risk of zoonotic disease transmission and vector born diseases such as malaria, dengue fever, zika virus and Lyme disease, challenging progress made in reducing the impact of these infectious diseases on children.
- The burden of other infectious disease pathogens, including those causing respiratory infections and diarrheal diseases are set to increase with climate change as well with implications for antimicrobial resistance patterns.
  - An additional 4.7 billion people may be at risk of malaria and dengue by 2070.



#1: Limit emission to meet 1.5 C threshold ensuring the best interest of the child

#2: Protect Children from the impact of climate change#3: Make informed decisions based on impact on child health and well-being

Full report: https://www.unicef.org/reports/threat-to-progress



#### #1: Limit emission to meet 1.5 C threshold ensuring the best interest of the child

- Countries with greater capacity and responsibility for emissions particularly high income and high-emitting countries among the G20 – take more ambitious and rapid action and provide financial and technical support to developing nations.
- Energy transitions in low- and middle-income countries that provide universal access to energy, lift millions out of poverty and expand strategic industries.
- The elimination of cooking poverty by 2030, enabling the world's poor to cook with modern fuels and technologies and reduce child deaths attributable to household air pollution.
- Scale up of climate education programmes in schools to improve the uptake of active mobility, sustainable diets and food practices.
- Accelerate transition to green infrastructure that ensures cleaner air, road safety, mental health and opportunities for physical activity, whilst supporting skills development in furthering a just transition.
- Decarbonization technologies are integrated with detoxification strategies to not aggravate the toxic burden on children and the planet.



#### **#2: Protect Children from the impact of climate change**

- 1. Provide caregivers with information and skills to protect children: multi-hazard early warning systems, orientation on unique vulnerabilities of children and protective actions, skilling workers on prevention, referral and management, engagement with community platforms
- 2. Ensure a focus on primary health care towards climate-resilient and low-carbon health systems: a supported health workforce equipped, health facilities operate through disasters, manage patient burden in flux, continuity in essential MNCH supplies, implement monitoring and surveillance systems
- 3. Safeguard access to food and water while establishing climate-resilient water and sanitation infrastructure: climate-resilient nutrition services, guaranteed food security, integrated water resource management, access to safe and resilient WASH systems
- 4. Ensure better preparedness and response to the triple planetary crisis: Prepare communities and institutions, adapt humanitarian action, implement effective response to outbreaks, promote adoption
- 5. Prioritize child-sensitive and shock-responsive social protection: invest in universal child benefits, disability and unemployment/pension benefits, establish insurance and credit options for adapting to emergencies, ensure child-critical services for displaced children



#### #3: Make informed decisions based on impact on child health and well-being

- Vulnerability and adaptation assessments prioritize the impact of climate change on child health and well-being across the life course.
- Generating evidence to establish global or country-level estimates of climate change-related child mortality or morbidity are available.
- National household surveys, such as DHS and MICS, and health information systems incorporate indicators to assess the impact of climate change on child health and well-being.
- Research focuses on the impact of climate change on children across the life course to support comprehensive local and national action including using implementation research and participatory action.
- Knowledge to action gaps at local and global levels are bridged through multistakeholder collaborative action on children's environmental health including through the global collaborative.





#### With the support of:

Governments and multilateral organizations









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LANCET COUNTDOWN: Tracking progress on health and Climate change







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**Civil society** 





de Pediatría















International Pediatric Association Every Child - Every Age - Everywhere







#### **A Threat to Progress**

Confronting the effects of climate change on child health and well-being







## Children's Environmental Health Collaborative

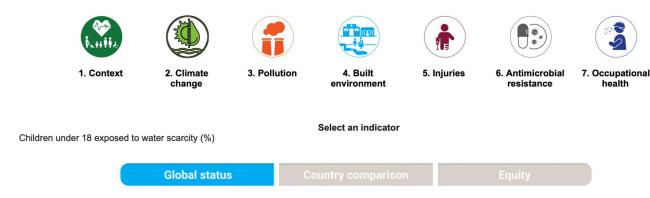
The mission of the Collaborative is to mobilize international action to protect child health and development from the impact of climate change and environmental degradation.

#### **Key Products:**

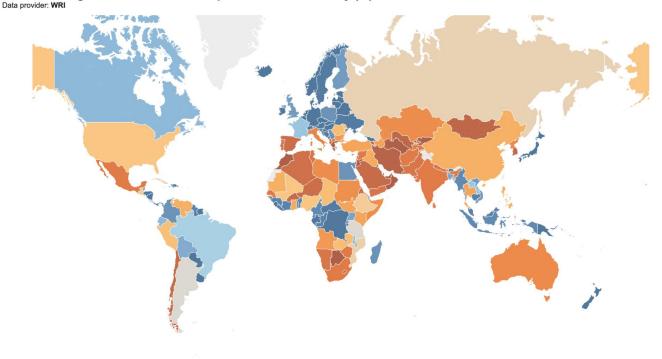
- <u>Protecting Children from Heat</u>
  <u>Stress</u>
- Safe from Wildfire Smoke
- <u>A Threat to Progress: Confronting</u> <u>the Effects of Climate Change on</u> <u>Child Health and Wellbeing</u>



#### **Children's Environmental Health Profiles**



#### Climate change: Children under 18 exposed to water scarcity (%)



# Reflections



Dr.Jeni Miller Executive Director Global Climate and Health Alliance



Dr. Hayalnesh Tarekegn Climate and Health Advisor Save the Children



Giulia Gasparri Technical Officer Partnership on Maternal, Newborn and Child Health





Children's Environmental Health Collaborative



Women's, Children's and Adolescents' Health



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# Climate Change and Health Forum



Engage with the moderators:

- Cara Endyke Doran: <u>cendykedoran@globalcommunities.org</u>
- Swathi Manchikanti: <a href="mailto:smanchikanti@unicef.org">smanchikanti@unicef.org</a>
- Hayalnesh Tarekegn (Bissie): <u>htarekegn@savechildren.org</u>

Reach out to the Child Health Task Force Secretariat: <u>childhealthtaskforce@jsi.com</u>

Subgroup information, recordings and presentations from previous webinars are available on the subgroup page of the Child Health Task Force website: <u>www.childhealthtaskforce.org/subgroups/expansion</u>

# Disclaimer

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