

# The coldest year of the rest of their lives

Protecting children from  
the escalating impacts  
of heatwaves

Executive summary



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**The climate crisis is rapidly accelerating and with it, heatwaves are becoming longer, stronger, more widespread and more frequent. Already, around 559 million children are exposed to high heatwave frequency and around 624 million children are exposed to one of three other high heat measures - high heatwave duration, high heatwave severity or extreme high temperatures.**

**This report provides yet more evidence that children are on the front lines of the climate crisis.**

By 2050, virtually every child on earth – **over 2 billion children** – is forecast to face more frequent heatwaves, regardless of whether the world achieves a ‘low greenhouse gas emission scenario’ with an estimated 1.7 degrees of warming in 2050 or a ‘very high greenhouse gas emission scenario’ with an estimated 2.4 degrees of warming in 2050. These findings underscore the urgent need to adapt the services children rely on as unavoidable impacts of global heating unfold. It also makes a case for more substantial emissions reduction, to prevent the worst impacts of the other high heat measures. Millions more children will be exposed to high heatwave severity and extreme high temperatures depending on the degree of global heating reached. Children in northern regions will face the most dramatic increases in high heatwave severity while by 2050, nearly half of all children in Africa and Asia will face sustained exposure to extreme high temperatures.

Heat is especially damaging to children’s health and affects their education and future livelihoods. Almost every country is experiencing changing heatwaves. What each government does now will determine the survival of those least responsible for this crisis – our children and young people.

### Main findings include:



**Extreme high temperatures:** In 2020, around 740 million children (1 in 3 children globally) lived in countries with 83.54 or more days per year exceeding 35°C. By 2050 under a very high emission scenario with 2.4 degrees of warming, this figure would rise to approximately 816 million (2 in 5 children).



**High heatwave frequency:** By 2050, under both low and very high emission scenarios, virtually every child on earth will be exposed to high heatwave frequency (i.e., living in areas where the average yearly number of heatwaves is equal to or above 4.5), rising from only 1 in 4 children in 2020.



**High heatwave duration:** While about 1 in 4 children live in areas where the average heatwave event lasts 4.7 days or longer as of 2020, by 2050, this percentage will rise dramatically to over 3 in 4 children under a low emission scenario of 1.7 degrees of warming. At 2.4 degrees of warming, 94 per cent of children will be exposed.



**High heatwave severity:** Under a low emission scenario with 1.7 degrees of warming, the number of children in areas where the average exceedance of a heatwave event is equal to or above 2°C will almost quadruple (from around 28 to 100 million) and see an almost eight-fold increase under a very high emission scenario with 2.4 degrees of warming (from around 28 to 212 million).

## WE MUST ACT NOW: PROTECT, PREPARE, PRIORITIZE, PREVENT

The climate crisis is rapidly getting worse. Children and young people face changes on a scale we are only now starting to experience. Heatwaves are just one manifestation.

How deadly and damaging the impact of climate hazards become for children and young people is dependent on the action taken now to prepare for and adapt to climate impacts and to limit global heating to 1.5°C. UNICEF urges leaders and governments to take immediate action to:

### PROTECT children from climate devastation by adapting social services

Children and young people are the most vulnerable to climate shocks including heatwaves.

- Every country must **adapt critical social services** - WASH, health, education, nutrition, social protection and child protection – to protect children and young people.
- **Food and social protection systems** made fragile by climate change, environmental crises and conflict must be strengthened to withstand hazards and ensure continued access to healthy diets. Increased investments must be made in the early prevention, detection and treatment of severe malnutrition in children, mothers and vulnerable populations.
- **Health systems** must be resilient to climate events and must be equipped to treat children and pregnant and breastfeeding women facing the impacts of heatwaves and other climate hazards.
- **WASH services** must be adapted to withstand climate-related disasters and weather variability to protect against contamination and shortages of drinking water supply. Risk assessments, early warning systems, and innovative technologies to monitor water supply and safety must be implemented to protect against water scarcity and contamination.
- **At COP27**, children and their rights must be prioritized in decisions on adaptation.

## PREPARE children to live in a climate-changed world

Children and young people have a unique stake in the climate agenda, as a direct threat to their rights and future prospects.

- Every country must provide children and young people with **climate change education, disaster risk reduction education, green skills training** and opportunities to meaningfully participate and influence climate policy-making.
- **COP27** must see countries strengthen the focus on children's climate education and empowerment in the ACE action plan, adopt it, and implement previous commitments to build youth capacity.

## PRIORITIZE children and young people in climate finance and resources

Protecting and preparing children and young people requires urgent funding and resources.

- Developed countries must deliver on their COP26 agreement to **double adaptation funding to \$40bn per year by 2025** at a minimum, as a step to delivering at least \$300bn per year for adaptation by 2030.

- **Adaptation funding** must make up half of all climate finance.
- **COP27** must unlock progress on loss and damage, placing the resilience of children and their communities at the center of discussions on action and support.

## PREVENT a climate catastrophe by drastically reducing greenhouse gas emissions and keep 1.5°C alive.

Emissions are projected to rise by 14 per cent this decade, putting us on a path to catastrophic global heating.

- All governments must revisit their national climate plans and policies to increase ambition and action. They **must cut emissions by at least 45 per cent by 2030** to keep heating to no more than 1.5°C.
- **G20 countries** – emitters of 80 per cent of all greenhouse gas emissions - must take the lead, yet all countries must act.
- The world must accelerate the transition to renewable energy production, all fossil fuel subsidies must end, windfall profits from fossil fuel producers must be taxed and redirected to the vulnerable, as urged by the United Nations Secretary General.

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