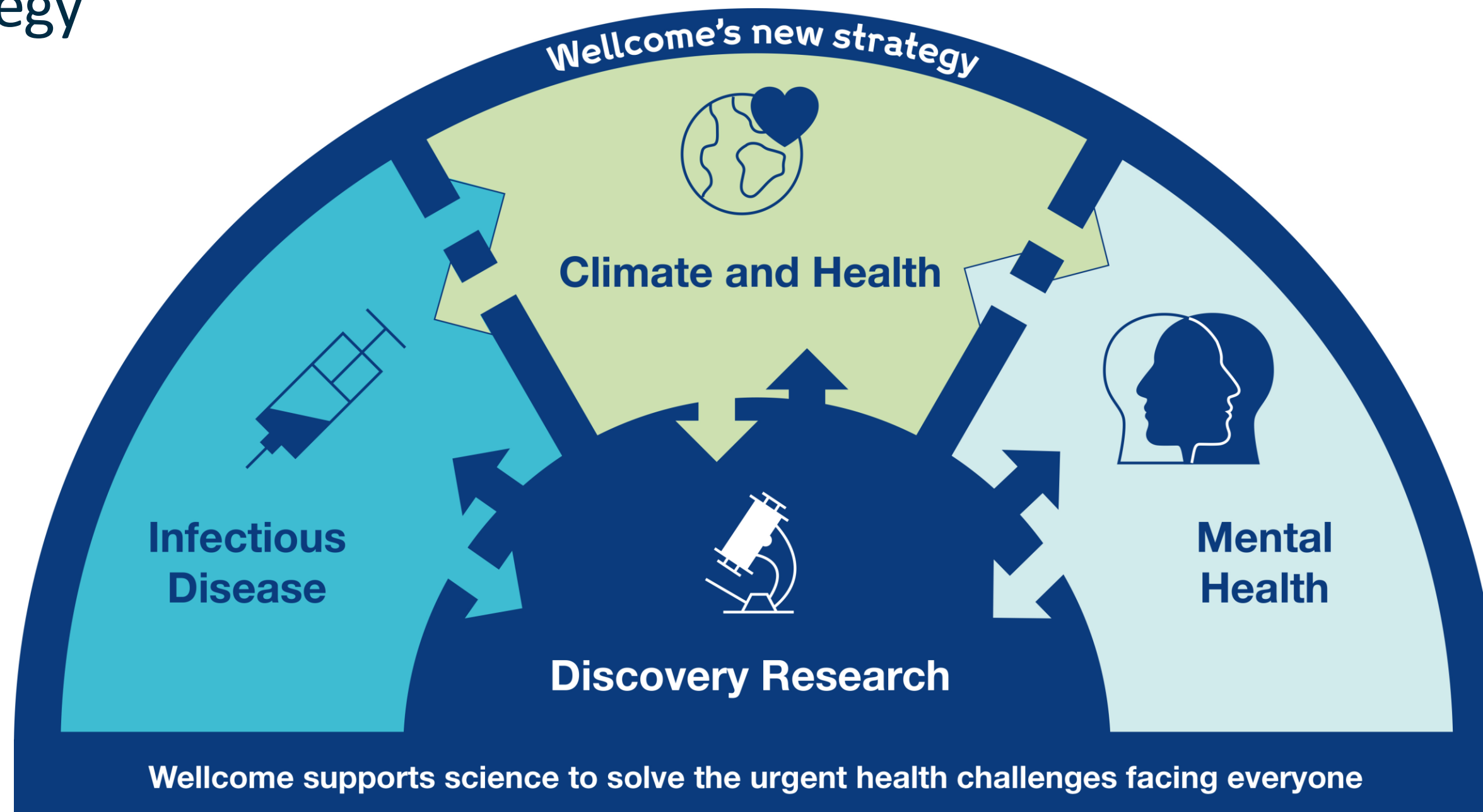


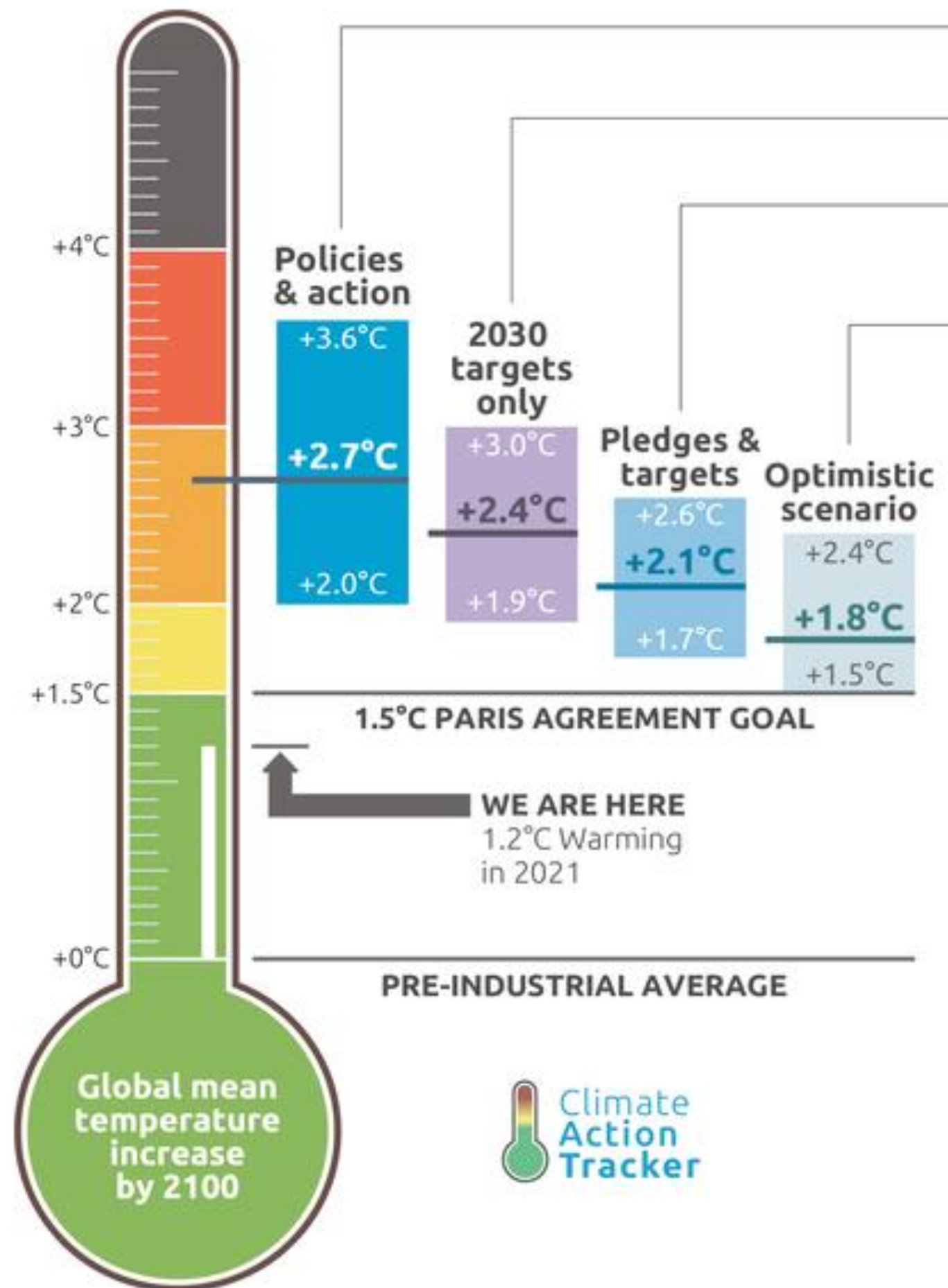


Climate & Health Strategy

Our Strategy



- **Diversity and Inclusion and Research Culture** will be embedded into the work we fund and do.
- We have committed to spending at least **£16bn in the next ten years**



- Policies & action**
Real world action based on current policies
 - 2030 targets only**
Full implementation of 2030 NDC targets*
 - Pledges & targets**
Full implementation of submitted and binding long-term targets and 2030 NDC targets*
 - Optimistic scenario**
Best case scenario and assumes full implementation of all **announced** targets including net zero targets, LTSs and NDCs*
- * If 2030 NDC targets are weaker than projected emissions levels under policies & action, we use levels from policy & action

CAT warming projections
Global temperature increase by 2100
November 2021 Update



Source:
<https://climateactiontracker.org/global/cat-thermometer/>

Climate and Health

Vision

A world where catastrophic climate breakdown is averted in a way that allows human health to flourish

Mission

Putting health to the heart of climate change action

- generate **evidence** that spurs action
- informing actions to **mitigate and adapt**
- advocating for **coordination and cooperation** – essential in building a healthy sustainable future



Goal 1

A transformational advance in the availability, access and use of evidence on the direct and indirect effects on health of climate change at local, national, regional and global levels

Goal 2

A transformational advance in the availability, access and use of climate change mitigation actions that have a disproportionately positive benefit to health

Goal 3

A transformational advance in the availability, access and use of mitigation-pathway-dependent climate change adaptations to protect health in vulnerable communities

Goal 4

Catalyse the development of a global Climate & Health research, policy and practice community that requests and uses evidence to inform policy and drive urgent actions

1. **Data, metrics, methods and tools** – Internationally standardised and accessible C&H research delivered through enhanced approaches to measurement, attribution, statistical methods, impact metrics and data platforms
2. **Field building** – Targeted capability building for a diverse field of researchers, policymakers and practitioners to support the embedding of a science-based global C&H agenda, accelerating the demand, generation, interpretation and implementation of transdisciplinary C&H evidence and policy
3. **Learning** – Globally accessible tools and resources that track progress and learnings towards evidence-based C&H action

Example early investments

Heat adaptation: evaluating interventions to help manage the health effects of heat

Award will fund teams led by researchers from low-or middle-income countries to test interventions to manage heat-related health risks in real settings.

Funding: £0.5- £2m, up to 5 years

Closed



Biological vulnerability to extreme heat in maternal and child health

Successful applicants (Mid/Senior PI) will have delivered new knowledge at this intersection and generated evidence with the potential to inform new interventions that can be used in real world settings.

Funding (Global): £0.5- £2m, up to 5 years

Deadline 8th Aug



Advancing evidence-informed mitigation policy solutions with health co-benefits in G7 countries

This award will fund collaborations between researchers and policy actors who have a clear opportunity to influence climate mitigation policies with substantial health effects.

Successful applicants will generate evidence which will support policymakers in G7 countries to advance transformative health-centred changes in the food systems, transport and energy sectors.

Funding (G7 Countries): £2m, up to 3 years

Deadline 31st Oct



Example investments in field building



Climate Health National Statistics Working Group

Objective: Improve the ability to track the health impacts of climate change through developing the capabilities of national statistics agencies and convening the international community around reporting methods and standards. **Partners.** Led by ONS with Cochrane Climate-Health Working Group and other partners.



The 2021 report of the Lancet Countdown on health and climate change: code red for a healthy future

Review



Marina Romanella, Alice McGushin, Claudia Di Napoli, Paul Drummond, Nick Hughes, Louis Jamart, Harry Kennard, Pete Lampard, Baltazar Solano Rodriguez, Nigel Amell, Sonja Ayebe-Karlsson, Kristine Belesova, Wenjia Cai, Diarmid Campbell-Lendrum, Stuart Capstick, Jonathan Chambers, Lingzhi Chu, Luisa Ciampi, Carole Dalin, Niheer Dasandi, Shouro Dasgupta, Michael Davies, Paula Dominguez-Salas, Robert Dubrow, Kristie L Ebi, Matthew Eckelman, Paul Ekins, Luis E Escobar, Lucien Georgeson, Delia Grace, Hilary Graham, Samuel H Gunther, Stella Hartinger, Kehan He, Clare Heaviside, Jeremy Hess, Shih-Che Hsu, Slava Jankin, Marcia P Jimenez, Ilan Kelman, Gregor Kiesewetter, Patrick L Kinney, Tord Kjellstrom, Dominic Kniveton, Jason K W Lee, Bruno Lemke, Yang Liu, Zhao Liu, Melissa Lott, Rachel Lowe, Jaime Martinez-Urtaza, Mark Maslin, Lucy McAllister, Celia McMichael, Zhifu Mi, James Milner, Kelton Minor, Nahid Mohajeri, Maziar Moradi-Lakeh, Karyn Morrissey, Simon Munzert, Kris A Murray, Tara Neville, Maria Nilsson, Nick Obradovich, Maquins Odhiambo Sewe, Tadj Oreszczyn, Matthias Otto, Fereidoon Owfi, Olivia Pearman, David Pencheon, Mahnaz Rabbaniha, Elizabeth Robinson, Joacim Rocklöv, Renee N Salas, Jan C Semenza, Jodi Sherman, Lihua Shi, Marco Springmann, Meisam Tabatabaei, Jonathan Taylor, Joaquin Trinanes, Joy Shumake-Guillemot, Bryan Vu, Fabian Wagner, Paul Wilkinson, Matthew Winning, Marisol Yglesias, Shihui Zhang, Peng Gong, Hugh Montgomery, Anthony Costello, Ian Hamilton

Executive summary

The *Lancet* Countdown is an international collaboration that independently monitors the health consequences of a changing climate. Publishing updated, new, and improved indicators each year, the *Lancet* Countdown represents the consensus of leading researchers from 43 academic institutions and UN agencies. The 44 indicators of this report expose an unabated rise in the health impacts of climate change and the current health consequences of the delayed and inconsistent response of countries around the globe—providing a clear imperative for accelerated action that puts the health of people and planet above all else.

The 2021 report coincides with the UN Framework Convention on Climate Change 26th Conference of the Parties (COP26), at which countries are facing pressure to realise the ambition of the Paris Agreement to keep the global average temperature rise to 1.5°C and to mobilise the financial resources required for all countries to have an effective climate response. These negotiations unfold in the context of the COVID-19 pandemic—a global health crisis that has claimed millions of lives, affected livelihoods and communities around the globe, and exposed deep fissures and inequities in the world's capacity to cope with, and respond to, health emergencies. Yet, in its response to both crises, the world is faced with an unprecedented opportunity to ensure a healthy future for all.

Through these effects, rising average temperatures, and altered rainfall patterns, climate change is beginning to reverse years of progress in tackling the food and water insecurity that still affects the most underserved populations around the world, denying them an essential aspect of good health. During any given month in 2020, up to 19% of the global land surface was affected by extreme drought; a value that had not exceeded 13% between 1950 and 1999 (indicator 1.2.2). In parallel with drought, warm temperatures are affecting the yield potential of the world's major staple crops—a 6-0% reduction for maize; 3-0% for winter wheat; 5-4% for soybean; and 1-8% for rice in 2020, relative to 1981-2010 (indicator 1.4.1)—exposing the rising risk of food insecurity.

Deepening inequities in a warming world

Record temperatures in 2020 resulted in a new high of 3.1 billion more person-days of heatwave exposure among people older than 65 years and 626 million more person-days affecting children younger than 1 year, compared with the annual average for the 1986-2005 baseline (indicator 1.1.2). Looking to 2021, people older than 65 years or younger than 1 year, along with people facing social disadvantages, were the most affected by the record-breaking temperatures of over 40°C in the Pacific Northwest areas of the USA and Canada in June, 2021—an event that would have been almost impossible without

human-caused climate change. Although the exact number will not be known for several months, hundreds of people have died prematurely from the heat. Furthermore, populations in countries with low and medium levels of UN-defined human development index (HDI) have had the biggest increase in heat vulnerability during the past 30 years, with risks to their health further exacerbated by the low availability of cooling mechanisms and urban green space (indicators 1.1.1, 2.3.2, and 2.3.3). Agricultural workers in countries with low and medium HDI were among the worst affected by exposure to extreme temperatures, bearing almost half of the 295 billion potential work hours lost due to heat in 2020 (indicator 1.1.4). These lost work hours could have devastating economic consequences to these already vulnerable workers—data in this year's report shows that the average potential earnings lost in countries in the low HDI group were equivalent to 4-8% of the national gross domestic product (indicator 4.1.3).

Adding to these health hazards, the changing environmental conditions are also increasing the suitability for the transmission of many water-borne, air-borne, food-borne, and vector-borne pathogens. Although socioeconomic development, public health interventions, and advances in medicine have reduced the global

Lancet 2021; 398: 1619-62

Published Online

October 20, 2021

[https://doi.org/10.1016/S0140-6736\(21\)01787-6](https://doi.org/10.1016/S0140-6736(21)01787-6)

This online publication has been corrected. The corrected version first appeared at [thelancet.com](https://www.thelancet.com) on December 9, 2021.

See Editorial page 1541

For the Chinese translation of the Executive Summary see Online for appendix 1

For the French translation of the Executive Summary see Online for appendix 2

For the German translation of the Executive Summary see Online for appendix 3

For the Spanish translation of the Executive Summary see Online for appendix 4

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Thank you!

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