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

Call overview

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Wellcome

Founded in 1936 by Sir Henry Wellcome

Wellcome is a politically and financially independent global charitable foundation, funded by a £38.2 billion investment portfolio. Based in London, UK, we dispense ~£1bn per year in support of our mission. As of October 2020 we have a new mission and strategic plan.
Vision: Science to solve the urgent health challenges facing everyone.

Mission: We support discovery research into life, health and wellbeing, and we’re taking on three worldwide health challenges: mental health, infectious disease and climate and health.
Wellcome’s new strategy

Climate and Health
“a world in which global heating does not harm health in the communities it affects most”

Infectious Disease
“a world in which escalating infectious diseases are under control in the communities most affected”

Discovery Research
“significant shifts in understanding that could lead to improved human health”

Mental Health
“a world in which no one is held back by mental health problems”

Wellcome supports science to solve the urgent health challenges facing everyone
Rationale for the call
Projected climate change

Source: IPCC, Climate Change 2014 Synthesis Report
There are few articles on the health effects of heat adaptation interventions and their impacts in low- and middle-income countries.
Aim and objectives of the call
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**Aim:** To evaluate heat adaptation interventions that are being implemented in low- or middle-income countries for their effects on health

**Objectives are to support studies which:**

- Evaluate the health effects of heat adaptation interventions in a low or middle-income country
- Develop methods for testing and evaluating heat adaptation interventions across a variety of health, socio-economic and implementation outcomes
- Provide evidence for policy makers and practitioners that is relevant to the local context
- Strengthen capacity to undertake and use this type of research in the country where the research is taking place
Who can apply
Eligibility

• Transdisciplinary teams: climate science, meteorology, epidemiology, public health, evaluation, implementation science, social sciences, economics

• Led (or co-led) by an applicant that is a national of and hosted at an institution that is based in an eligible low- and middle- income country

• Include collaborating partners from policy and/or practice-based institutions in the country where the intervention is taking place
Host organisation

Host organisation can be one of the following:

- higher education institution
- research institute
- non-academic healthcare organisation
- not-for-profit organisation
The team

- Strong track record in intervention design and evaluation research
- Strong track record in managing and training others
- Experience of designing and planning research projects in collaboration with policy and practice partners (e.g. from government, NGOs or other relevant institutions)
- Lead applicants will need to be able to contribute at least 20% of their time to this project.
- Co-applicants will need to be able to contribute at least 10% of their time to this project.
Projects we will support
### Studies that are in and out of scope

<table>
<thead>
<tr>
<th>In scope</th>
<th>Out of scope</th>
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<tbody>
<tr>
<td>Studies that evaluate the effects of heat adaptation interventions on health in real settings*</td>
<td>Studies that exclusively model health effects and do not measure any impacts of interventions in real settings</td>
</tr>
<tr>
<td>Studies of interventions in low- and middle-income countries</td>
<td>Studies of interventions in high-income countries</td>
</tr>
<tr>
<td>Studies that evaluate the direct effects of heat on human health as a primary outcome</td>
<td>Studies of interventions where the primary impacts on human health are indirect e.g. via agricultural crop yields, or harmful algal blooms</td>
</tr>
<tr>
<td>Interventions that aim to reduce the impacts of excess or chronic heat on health</td>
<td>Interventions that aim to reduce the effects of cold temperatures on health</td>
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*Interventions can be new or already exist*
Interventions can range from individual to policy level

<table>
<thead>
<tr>
<th>Intervention type</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Individual, household-level interventions</td>
<td>Awareness raising and behaviour campaigns, clothing, hydration technologies or plans</td>
</tr>
<tr>
<td>Technological interventions</td>
<td>Personal and ambient heat stress sensors, specialised materials</td>
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<tr>
<td>Infrastructural interventions</td>
<td>Shelter design, cool housing, shade provision, water provision</td>
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<tr>
<td>Nature-based interventions</td>
<td>Parks, green roofs/walls, trees, standing water bodies</td>
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<tr>
<td>Institutional or policy interventions</td>
<td>Heat action plans, occupational safety regulations, built environment policy and plans, building policies</td>
</tr>
<tr>
<td>Cultural or behavioural interventions</td>
<td>Traditional practices, clothing, shelter design</td>
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</tbody>
</table>

Note: this table is for illustrative purposes only and is not an exhaustive list.
Outcomes we are interested in

Health outcomes
Immediate heat-related impacts e.g. dehydration, electrolyte imbalances, heart rate. Morbidity or mortality linked to heat e.g. low birth weight, pre-term birth, kidney disease, mental health illness.

Associated wider outcomes
Social and economic outcomes that are important to decision-makers such as labour productivity, household income, hospital burden or other unintended consequences.

Implementation outcomes
Outcomes which assess whether or not the intervention works e.g. acceptability, feasibility, appropriateness, cost, scalability and whether the intervention can be sustained in the long-term, including in the context of a changing climate.
Co-production

We expect research projects to be designed and planned in collaboration with in-country partners from policy, practice and implementation so that:

• they are responsive to local needs, interests and contexts
• the findings will be more likely to be acted on
• the interventions will be more likely to be maintained in the long-term, beyond the duration of the project

We particularly encourage South-South collaboration where possible.
## Assessment criteria breakdown

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighting</th>
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<tr>
<td>Strategic importance, approach and methods</td>
<td>50%</td>
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<tr>
<td>Team, skills and experience</td>
<td>25%</td>
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<tr>
<td>Capacity strengthening, research environment and uptake</td>
<td>25%</td>
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Call timeline

- Launch 8th Mar 2022
- Preliminary application deadline: 31st May 2022
- Full applications invited: July 2022
- Full applications deadline: 5th September 2022, 17:00 BST
- Decision: Dec 2022
- Projects commence from January 2023 onwards
Thank you

To apply and for further information visit
https://wellcome.org/what-we-do/climate-and-health

Email questions to: heatadaptation@wellcome.org