

Social protection for extreme temperatures:

Experiences from the UK, USA and France

BRIEFING NOTE

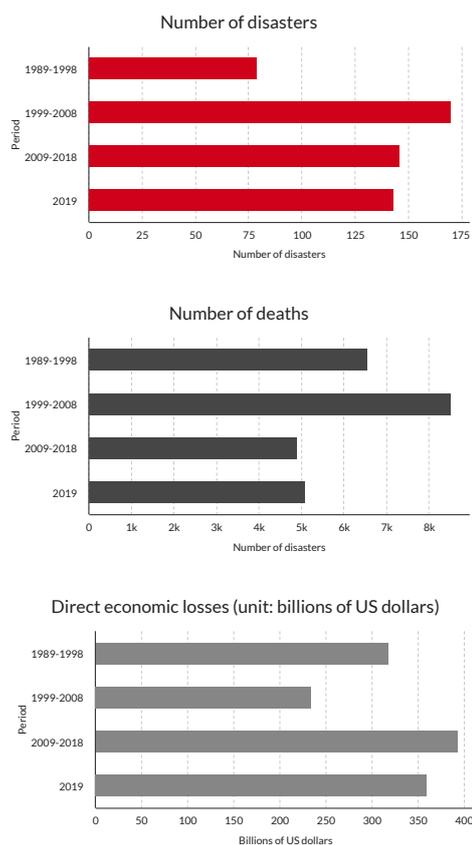
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Around the world, climate change is impacting communities' livelihoods and well-being. Extreme weather events have killed more than 1.3 million people in 1998–2017, with about 4.4 billion people affected (by injury, homelessness or the need for emergency services, etc.) and caused economic losses of 2.9 billion US dollars (Wallemacq and House 2018). Over the last decade, extreme weather events have also displaced 20 million people annually (Wood 2019). Weather events causing temperature extremes, like heat- and cold waves, often go unnoticed as they are 'silent.' In 1998–2017, more than 166,000 deaths occurred due to heatwaves. Of these, 70,000 deaths occurred during the 2003 heatwave in Europe, with France alone accounting for nearly 15,000 deaths (World Health Organization n.d.). The so-called "Beast from the East" – a nickname for the 2018 cold wave that affected Great Britain and Ireland – also caused thousands of people to lose their lives (Chenel and Moynihan 2020).



Snow emergency/American Red Cross



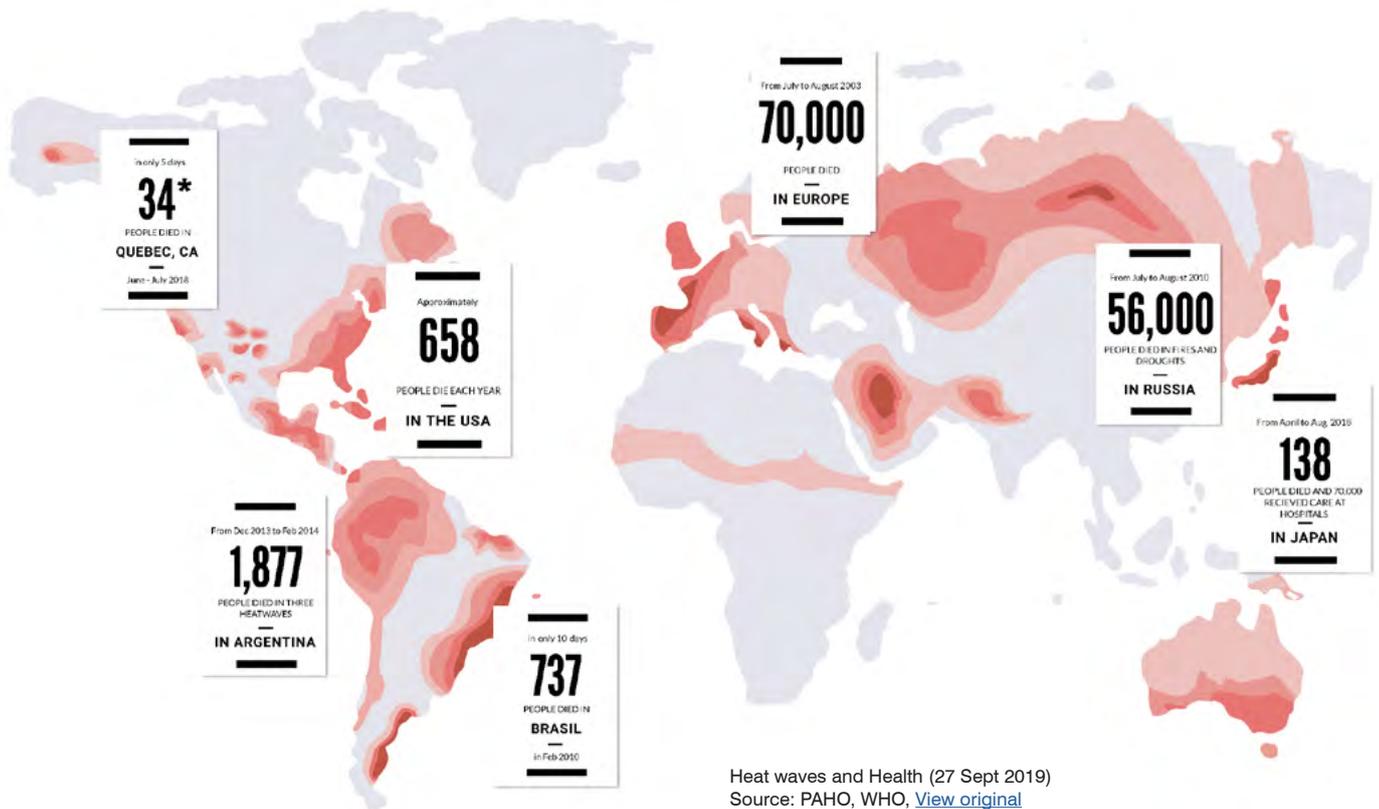
Source: https://www.preventionweb.net/files/73363_2019globalnaturaldisasterassessment.pdf

These events are already occurring more frequently and are more intense due to climate change. They are also predicted to intensify further in the future (IPCC 2012). The burden of climate change is disproportionately allocated (Wallemacq and House 2018), affecting the poor and vulnerable in both low- and high-income countries (Heltberg *et al.* 2009; Plumer and Popovich 2020). Marginalized and vulnerable groups are more likely to lack the economic and social capital to prepare for and recover from catastrophic disasters like hurricanes, wildfires, flooding, droughts or extreme temperatures (Dulal and Shah 2014; Lovell and Lung'ahi 2019).

Along with governments, humanitarian agencies and international organizations, the Red Cross Red Crescent Climate Centre is interested in understanding how policies and programmes allow vulnerable communities to adapt to climate change. Social Protection (SP) policies are tools for addressing different risks and vulnerabilities that people face, including those arising from climate change. In recent years, there has been increasing attention to the role of SP programmes and policies for managing climate change risks and vulnerabilities. While this agenda has mostly centred around evidence from low- and middle-income countries, a number of lessons can be learned from the experience of high-income countries in linking social benefits with climate risk management.

In a recent analysis, we studied the climate-sensitive SP programmes and policies that incorporate extreme temperature events from three high income countries: the United States of America, United Kingdom and France. Through case studies and key informant interviews in New York City (NYC), London and Paris, we investigated how these cities use SP programme elements to help vulnerable communities respond to cold waves (and heatwaves, to some extent). The insights from this research will provide lessons and recommendations for international organizations that can be applied and translated to a variety of contexts across the globe.

The Home Energy Assistance Program (HEAP), Cold Weather Payment programme and the energy vouchers scheme (le chèque énergie) are SP programmes designed to respond to the threat of extreme cold in the US, UK and France respectively. Under these programmes, vulnerable households that meet eligibility criteria receive benefits to reduce their energy costs. Under HEAP, households are eligible for benefits to pay their heating costs and assist with the cleaning, repair or replacement of their furnace, boiler and/or essential heating equipment. The US federal government allocates funding for HEAP, while local and state governments handle the programme's implementation. The Cold Weather Payment is forecast based and dispersed during periods of extreme cold by the UK's Department for Work and Pensions, in coordination with the Meteorological Office. The energy voucher scheme is distributed annually to qualifying households by France's Ministry of Ecological and Solidarity Transition, with the objective of helping them to pay their energy bills and complete home-based energy renovation projects. While the three programmes function differently, they share a common objective: reducing the harmful effects of extreme cold temperatures on low-income households.



Findings from the three social protection programmes for cold waves

There are positive outcomes of these programmes:

- Under these schemes, vulnerable households receive benefits to cover part of their energy costs. These additional funds allow households to spend their limited income on other essentials, like food and medicine, and avoid having to choose between eating or heating their homes, which advocates of the programme state is a dilemma faced by these households.
- These programmes protect vulnerable households from the harmful effects of extreme cold by providing them with a means to cover their energy costs and/or improve the energy efficiency of their homes. These measures, therefore, have the potential to safeguard people with respiratory and circulatory illnesses that are exacerbated by living in cold homes.
- These SP programmes go beyond traditional cash benefits because they include incentives for renovating homes to make them more energy efficient. As such, they implement measures intended for long-term adaptation, rather than offering only short-term solutions. In NYC, HEAP dedicates a portion of its budget to such a 'weatherization' concept, referring clients to an agency that administers the Weatherization Assistance Program. In Paris, households can save their vouchers for up to three years to accumulate enough funds to pay for energy efficiency projects. However, in London and Paris, these SP programmes alone do not provide sufficient funding for energy efficiency projects, leaving vulnerable households to seek a mixture of funding from the

government and private sector through different schemes to ultimately increase the amount of benefits they receive. Increased funding and better coordination between the municipal and national governments and the private sector will improve these programmes' ability to deliver an adequate benefit size and extend coverage.

There are also some challenges:

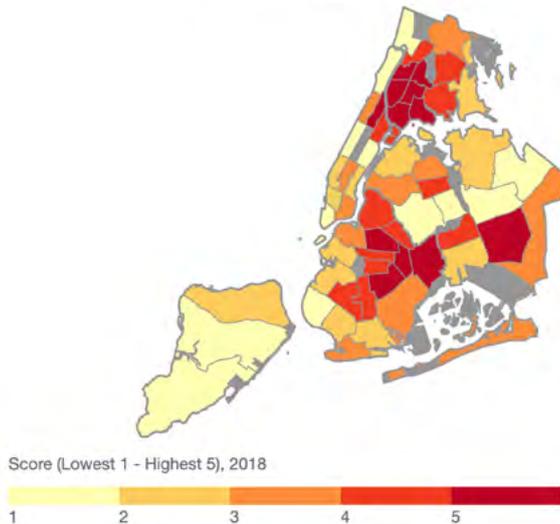
- The benefit amounts tend to be relatively small and do not always cover heating costs, especially during prolonged cold spells.
- The application process tends to be burdensome and additional barriers in the implementation of these programmes prevent eligible households from accessing the benefits. In NYC, for example, residents apply for HEAP by mail or in person, which can result in long waiting times or return trips if an applicant forgets the required documentation. In London, vulnerable households receive the Cold Weather Payment by pre-qualification through other benefits. This policy instrument does not target those who are unaware of these benefits or fail to apply.
- Most programmes do not cover energy costs or additional cash benefits for heatwaves. HEAP is the only programme with limited funding for the purchase of an air conditioner or fan. To qualify, a member of the household must have a certificated medical condition that is exacerbated by heat, and such documentation can prove difficult to obtain.
- With the intensity of heatwaves projected to increase under a changing climate, cities like New York and Paris rely on cooling centres as a mechanism to address extreme heat. The three cities have also created a process for identifying and checking on vulnerable individuals during heatwaves. As extreme heat events become more frequent, the expansion of the existing cold wave-related programmes to cover cooling costs during heatwaves will be needed to address this gap.
- With the exception of the UK, there are no links to weather variability or extremes in these programmes; neither are weather forecasts used to increase preparedness. The benefit stays the same regardless of the severity of winter, so households are less protected during periods of extremely low temperatures.
- These programmes do not cover costs related to other hazards. In the UK, for instance, some extreme storms and high winds can cause a sudden drop in temperature, increasing the need for heating in homes. But unless the low temperatures continue for seven days, people do not receive payments.
- Undocumented individuals and households – for example, poor people living in unconventional housing like boats and caravans – are likely to be disproportionately at risk of underheating in their homes. These schemes do not have provisions to cover individuals in informal settings.

Additional services for reducing the impacts of extreme temperatures

In addition to these SP policies and programmes, the analysis revealed that the three cities adopted other interventions to prepare households to respond to extreme temperatures. They are also working to adapt people's behaviours during these periods and connect them to trusted community messengers who can provide accurate

information. For example, the Seasonal Health Intervention Network (SHINE), created in 2010, in the borough of Islington in London provides advice and referral programmes to address people's vulnerabilities and connect them to services that prevent their hospitalization caused by extreme cold or heat. These cities are also incorporating solutions that cover risks that cannot solely be managed at the household level. For instance, *Cool Neighborhoods NYC* is a programme that supports New Yorkers to prepare for climate-related risks associated with extreme heat. It includes mitigation strategies, such as planting more trees, painting roofs and pavements lighter colours and installing green infrastructure in the city.

Heat Stress: Heat Vulnerability Index - Score (Lowest 1 - Highest 5), 2018, Neighborhood (Community District) New York



Source: <http://a816-dohbesp.nyc.gov/>

Lessons learned and the way forward

The idea of using SP programmes and policies for climate-related risks has been gaining traction in recent years, but the evidence of best practice along with efficient and effective interventions – especially for weather related urban risks – remains limited. In high-income countries, where SP programmes focus on extreme temperature events, the primary concern has been extreme cold – the emerging threat from heatwaves has yet to be taken into account. While the interviews did not find a firm justification as to why cities have mostly focused on cold temperature events and not on heatwaves, it is possible that there are gaps in understanding the severity and consequences of hot weather, related to existing risk perceptions at institutional level.

Nevertheless, this study has highlighted a number of lessons and recommendations that can help global and national policymakers and international agencies as well as the Red Cross Red Crescent Movement in enhancing SP's role in reducing the harmful impacts of climate change on vulnerable people across the world.

Recommendations for policymakers

SP, climate and disaster management policymakers in international and national agencies should take into account the risks posed by extreme temperatures and design programmes that help the most vulnerable people to deal with the associated impacts. When designing appropriate SP programmes to manage these risks, it will be important to keep the following issues in mind:

Adequately identifying risks and vulnerabilities

Policymakers will need to adopt policies and programmes that are comprehensive and address the different risks affecting different groups of vulnerable people: extreme heat and extreme cold may pose risks to older adults, reducing their ability to cope; school attendance may dip if children find it difficult to go to school during very low or high temperatures; people with some pre-existing medical conditions may suffer further when exposed to extreme temperatures. Different vulnerabilities and tailored interventions need to be incorporated into the programme's design. Policymakers will need to consider the public health impacts of extreme temperatures and create partnerships with experts in the public health sector to design SP policies or programmes that address these concerns.

Risk mapping of geographic zones that are vulnerable to extreme temperature events can help in planning ahead. It can also be beneficial to partner with technical institutions (universities, research centres, meteorological departments, etc.) to conduct further research to identify the risks and help to develop triggers that can forecast future events. Integrated planning, founded on technology and scientific evidence, can promote anticipatory action.



Designing appropriate and complementary benefits and interventions

Monetary benefits transferred through SP channels should be commensurate with the household size and heating source used to compensate for heating expenses. This necessitates regular data updates and monitoring.

Information dissemination, training and awareness campaigns can be beneficial and complement the delivery of monetary benefits through SP to vulnerable households and individuals. During periods of extreme temperatures, vulnerable people might also need assistance at home, especially the elderly or people with disabilities or illnesses. This could include working with civil society organizations to provide emergency social care, such as checking on people, reminding them of useful measures; and, if needed, transferring them to a safer place (e.g. cooling centres).

Consultations with different government departments (e.g. disaster management and SP divisions), universities, beneficiaries and other stakeholders during the programme's design, implementation and monitoring and evaluation phases will help to capture different perspectives that can be used to tailor policies and programmes to meet the needs of vulnerable communities.

Data, information and early warning systems

Forecast-based Action (FbA) – that reduces disaster impacts by using triggers for early action based on a forecast – can be helpful for extreme temperature events, given the relatively accurate predictability and ease of forecasting heat- and cold waves. Repositories of in-depth forecast information along with a risk analysis of vulnerable groups can improve the effectiveness of FbA. Creating a database with the locations and contact information of vulnerable people for non-government, civil society and social services organizations – that can be mobilized quickly in case of prolonged temperature events for the prompt distribution of items like fans, quilts/blankets or even emergency cash – can be useful.

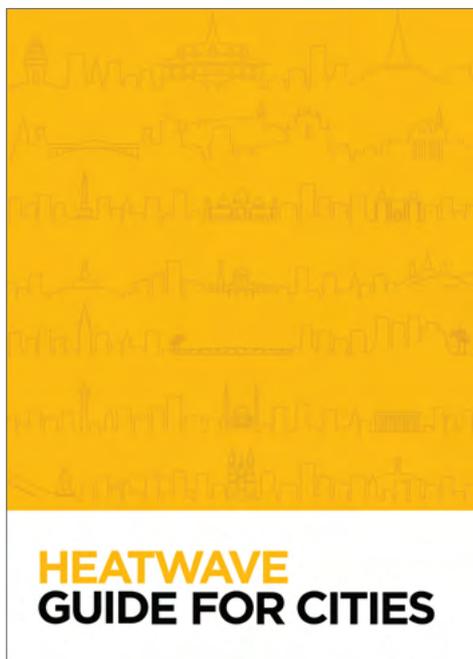
A major gap identified by the study was a lack of impact evaluation reports on the effectiveness of the three programmes. Regular impact evaluations are necessary to check whether the programmes are achieving their objectives. It is also important to use monitoring tools to check that the SP programmes' databases are up to date, as most of these schemes use pre-existing beneficiary lists for deciding eligibility.

Engaging with the private sector and civil society

Engaging with local civil society organizations is crucial, not only for raising awareness and conducting training for communities about the risks of extreme temperatures, but also in providing emergency care to people already registered in SP beneficiary lists, etc.

Seeking out opportunities for the private sector to contribute to these programmes, especially to promote long-term adaptation, can include creating incentives for utility companies and landlords to fund energy efficiency renovation and improvements.

Lessons learned and recommendations for the Red Cross and civil society organizations



- Create training modules, handbooks and guidance documents that inform policymakers about the effects of extreme temperature events and how to modify existing SP programmes and policies that address these risks.
 - Engage with policymakers and other community organizations in the dissemination of information about the risks of extreme temperatures.
 - Assist in the identification of vulnerable groups; help to create a regional database of beneficiaries; and analyze ways to leverage existing SP programmes during extreme temperature events. During periods of extreme heat, assist the government in: the coordination of cooling centres; the distribution of essential supplies; and the delivery of social care services as part of the social protection package (e.g. home visits, online psychosocial support sessions).
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- Ensure community participation and integration of the voices of vulnerable communities into the process of developing and implementing climate-sensitive SP programmes and policies.
 - Support the development and operationalization of early warning systems for extreme cold and extreme heat (e.g. Forecast-based Financing systems for extreme temperatures).
 - Identify and acknowledge heat- and cold waves as potential shocks that will require more humanitarian support with a changing climate.
 - Advocate for greater investments in, and continual improvements of, government SP systems around the world, which need to be operational and well-functioning to be able to support their beneficiaries to manage extreme temperatures and other hazards.



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The findings and conclusions in this brief are those of the authors alone and do not necessarily reflect the views of the Red Cross Red Crescent Climate Centre, the IFRC or its National Societies.