



GLOBAL HEAT HEALTH INFORMATION NETWORK

15 December 2020 / GEO Community of Practice

WHO WE ARE

The Network is an independent, voluntary, member-driven forum of **scientists, practitioners, and policymakers** focused on enhancing existing efforts to address heat health risk.



Knowledge
Broker



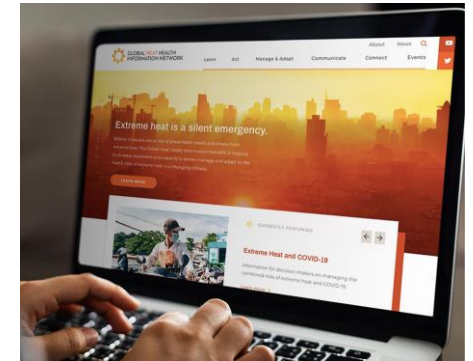
Go-to
resource hub



Member-driven
forum



Not a funding
or grant-making
mechanism

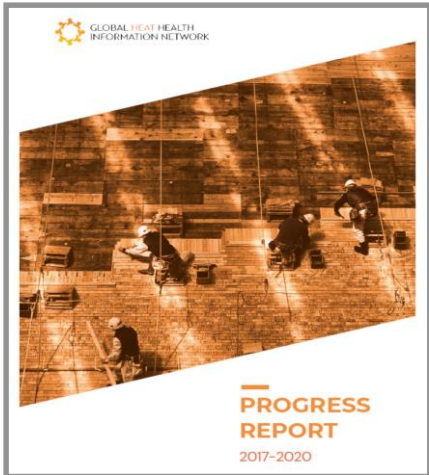


OUR FOCUS



Call to Action from the
First Global Forum on
Heat and Health

December 2018 / Hong Kong, China



- 1. Awareness**
Urgently improving awareness of the disaster that increasing extreme heat poses to human health, wellbeing, and productivity worldwide.
- 2. Partnership**
Catalyzing and sustaining interdisciplinary partnerships and co-learning between research and practitioners across relevant government, academic, private sector and civil society bodies.
- 3. Synthesis**
Synthesizing and advancing science and technology available for decision making and risk reduction across sectors and time scales.
- 4. Expertise**
Improving access to expert resources and opportunities for learning, exchange, and engagement.
- 5. Leadership and Action**
Identifying and promoting action to address critical gaps in research, knowledge and action.

WHO WE ARE

Government agencies / academic institutions / international organizations / NGOs / private sector and individuals in relevant fields

Diverse expertise and perspectives

Our members self-select, enhancing inclusion of a broad range of global organizations and professionals

Compatible motivation

The mission and values of our members are expected to be compatible with our vision.

Scientific integrity and shared principles

Members will be encouraged to uphold scientific integrity and principles of good public health practice.



KEY ACTIVITIES

We help improve the **knowledge** and **capacity** of governments, organizations, and professionals to protect populations from the avoidable health risks of extreme ambient heat.

By bringing together the work and progress of its members we help create a more holistic picture of the needs, science, and strengths across the network.



Technical Workshops



Online Platform / Monthly Digest



Global synthesis + technical products



Global Forum Events / Calls



Learning events & exchange



Technical working groups

2021 – 2023
Workplan just approved



Moving toward regional communities, pilot projects, new partnerships, and affiliated research and technical products

New Website

New features for users:

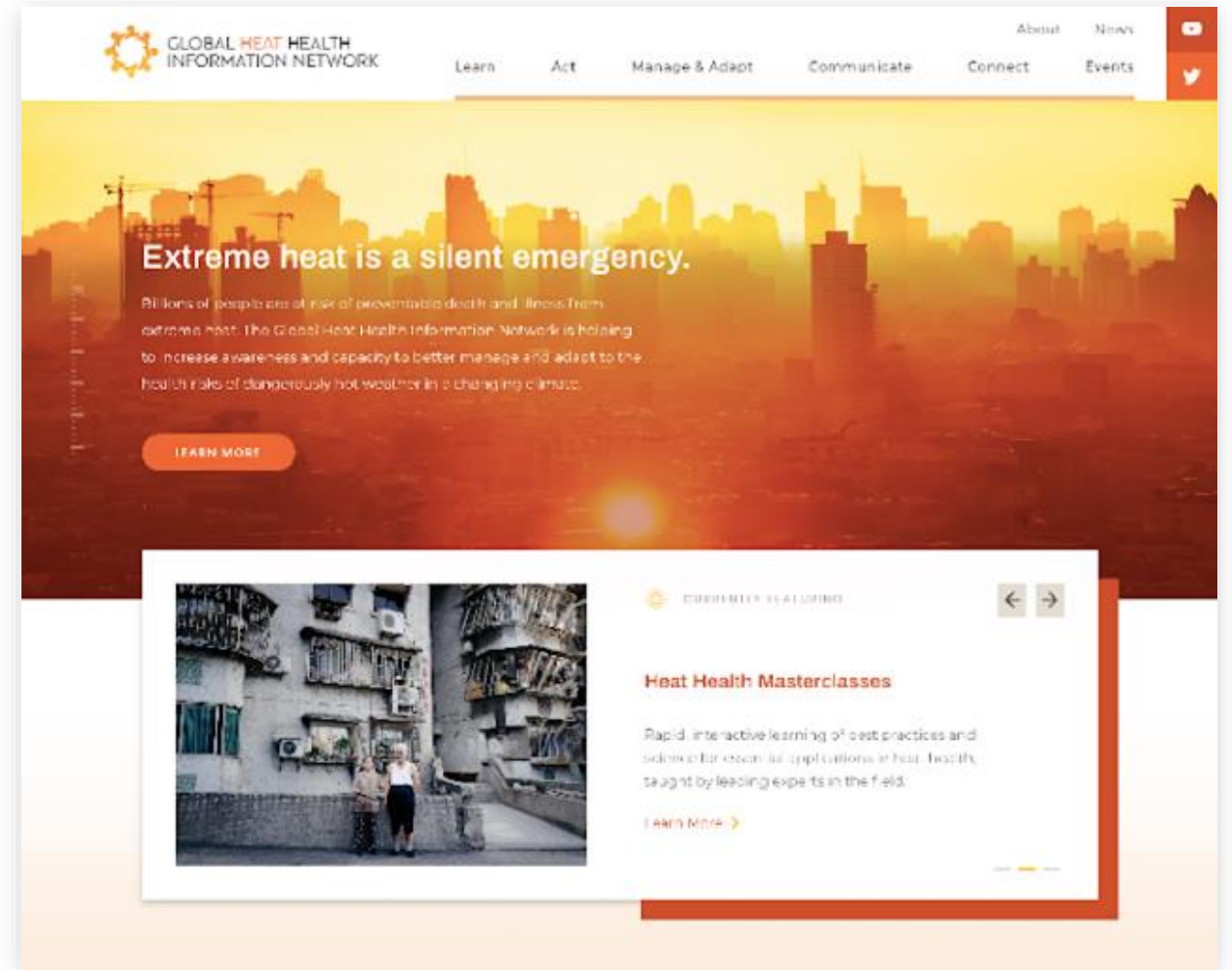
- Resource library and learning
- Easy to use tools and services directory
- Focus areas: work, urban, sports, home, etc.
- Inventory/maps of heat health action plans, case studies, projects
- Expert directory
- Events and Opportunities
- [coming soon] Heat Action Platform

directory of evidence and evaluation of interventions

Opportunity to feature

GEO-Health produced tools, resources and projects

Submit -



Heat Health Dialogues / 28-29 July 2020

Thematic Focus on Urban and Occupational Heat Risks

Dialogues

- Key messages + Priorities
- Complementary thematic activities

Masterclasses on UHI Technical Report on Climate Change and Occupational Heat Stress Thematic Resources

GLOBAL HEAT HEALTH INFORMATION NETWORK

HEAT HEALTH DIALOGUES | OUTCOME BRIEF

HEAT IN THE CITY

28 July 2020 | Conveners: Ludd Keith, University of Arizona; Julia Anglin, American Red Cross and the Red Cross Red Crescent Climate Centre; Chao Ben, University of Hong Kong

On 28 July 2020 experts on heat in urban settings explored the state of the practice of increasing resilience to extreme heat in cities across the world, from their diverse perspectives of governance, planning, design, and vulnerable populations. Presentations were followed by a facilitated panel discussion and audience engagement.

Key Messages

- Over half of the world population now lives in cities that are disproportionately heating due to climate change and the urban heat island effect.
- Significant temperature variations across a city can exist as microclimates result in broad ranges of heat exposure. Urban hotspots may be experiencing "heatwave conditions" far before meteorological heatwaves are declared.
- Heat exposure in cities is deadly, yet preventable with long-term urban planning, civic engagement, and effective cross-government emergency management.
- Cities represent innovative hubs that have the potential to catalyze new opportunities, such as good governance, protective social measures and urban design for cooling.

The following issues emerged from the dialogue:

- Vulnerable populations within cities are disproportionately affected by extreme heat, including the elderly, disabled, low-income communities, and communities of color.
- Heat risk advisories should consider the urban microclimate vulnerable and exposure to target the areas worst affected.
- Maintaining safe indoor temperatures during warm seasons is challenged by a tried of factors related to energy and cooling access, housing materials and design, and socio-economic conditions.
- Metrics to monitor, evaluate, and track progress on addressing urban heat risks are vital to target interventions appropriately and save lives.
- Governance, particularly leaders at urban scales, have the ability to enact a wide range of locally tailored and responsive policies, thus playing a major role in the success of urban interventions.
- Diverse and ever-evolving solutions addressing urban heat are underway all over the globe that both mitigate greenhouse gas emissions and have often immediate and significant benefits for human health, and we need to scale them further.
- Effective collaboration and learning across cities and sectors, including active and inclusive engagement with community members, can unlock the potential of cities to combat extreme heat and protect the most vulnerable.

Dialogue Outcomes Heat in the City 1

GLOBAL HEAT HEALTH INFORMATION NETWORK

HEAT HEALTH DIALOGUES | OUTCOME BRIEF

HEAT IN THE WORKPLACE

29 July 2020
Conveners: Jason Lee, National University of Singapore, Elspeth Oppermann, Ludwig-Maximilians-Universität

During this dialogue session experts explored the state of the science, new research outcomes into overlooked worker populations, and practical interventions into occupational heat health in Europe, Central America and Vietnam. A facilitated panel discussion and audience engagement followed presentations.

Key Messages

- The risk of occupational heat stress is increasing in global temperatures rise due to a changing climate, and vulnerability to heat stress increases due to workforce aging and the pervasiveness of non-communicable diseases.
- Exertional heat stress can happen even to healthy individuals. It is caused by exercise or physical work when the body cannot relieve the high amounts of heat generated by metabolism. However, even those who remain at rest can experience heat stress when exposed to hot indoor or outdoor conditions, and/or when wearing insulated protective clothing.
- Heat stress can be prevented with knowledge and planning, and empowering workers to use often low-cost technologies and behaviors. Simple steps to protect workers from heat stress can lead to significant economic savings for both workers and employers, by reducing attrition and illness.
- The impact of heat stress on the workforce has major implications for local economies and livelihoods, including job loss, income loss, and reduced national gross domestic product (GDP), in addition to threatening lives and well-being.
- Heat has an inequitable impact on the workforce. The workers often most affected are low-wage agricultural and construction workers (who may be either local or migrant), as well as the working poor, who all have limited access to social protection, and to whom lost wages have significant livelihood impacts. Additionally, indoor workers, such those working in factories, can disproportionately experience heat stress.
- Outdoor and indoor workers are exposed to multiple environmental hazards in addition to heat, including hazardous air quality, noise, solar radiation, and risk of physical injury. The combined effects are neither well understood or comprehensively managed.
- Responsibility for worker safety falls with governments, employers, and workers themselves. Worker education can empower individuals to know when conditions are dangerous and what to do to protect themselves and co-workers.
- Solutions exist in the form of transformative labour policies (such as those that fundamentally address social institutions to promote equality and equity), increased advocacy and social dialogue, awareness raising, tailored warning systems, and targeted heat mitigation plans.

Dialogue Outcomes Heat in the City 1

Extreme Heat and COVID-19 Information Series



Technical Briefing document, 15 Q&As, and checklists

- General Considerations and Evidence on Heat and COVID19
- Issues for health workers and facilities
- Issues for city authorities and heat action planners
- Checklist for Heat Action Planners
- Examples of good practice

37 Authors + 31 Reviewers
25 Countries

COVID+Heat Info Series Impact

800+ media mentions / 13+ languages (May)

20,000 visitors to website



Coronavirus disease (COVID-19): Ventilation and air conditioning

29 July 2020 | Q&A

What is ventilation?



What is WHO doing to address ventilation in the context of COVID-19?



WHO has contributed to guidance on ventilation and air-conditioning systems in the context of COVID-19, available [here](#).

WHO works closely with the World Meteorological Organization Joint Office for Climate and Health and the United States National Oceanic and Atmospheric Administration (NOAA) through the Global Heat Health Information Network to develop and update this guidance.

More Q&As on COVID-19 and ventilation in public spaces and buildings are available [here](#).



Health advice for hot weather during the COVID-19 outbreak

Every year, high temperatures affect the health of many people, particularly older people, infants, people who work outdoors and the chronically ill. Heat can trigger exhaustion and heat stroke, and can aggravate existing conditions – such as cardiovascular, respiratory, kidney or mental diseases. The adverse health effects of hot weather are largely preventable through good public health practice, while also following the advice to protect yourself from coronavirus disease (COVID-19).

Keep out of the heat.
Avoid going out and doing strenuous activity during the hottest time of day. Take advantage of special shopping times for vulnerable groups whenever available. Stay in the shade, do not leave children or animals in parked vehicles, and if necessary and possible, spend 2–3 hours of the day in a cool place while respecting physical distance of at least 1 meter.

Keep your home cool.
Use the night air to cool down your home. Reduce the heat load inside the apartment or house during the day by using blinds or shutters and turning off as many electrical devices as possible.

Keep your body cool and hydrated.
Use light and loose-fitting clothing and bed linen, take cool showers or baths, and drink water regularly, while avoiding sugary, alcoholic or caffeinated drinks.

Keep cool during the COVID-19 outbreak.
Avoid exposure to the sun or to temperatures higher than 25°C, as there is no evidence that this prevents or cures COVID-19, and it increases your risk of sunburn and heat-related illness. You can catch COVID-19 no matter how sunny or hot the weather is, so protect yourself and others by washing your hands regularly, coughing into your elbow, and wearing a face mask.

Дополнительную информацию можно получить по приведенным ниже ссылкам:
Рекомендации общественного здравоохранения о предупреждении последствий жары для здоровья:
<http://www.euro.who.int/en/public-health-advice-on-preventing-health-effects-of-heat>
ВОЗ призывает: спасайте человеческие жизни – соблюдайте чистоту рук в контексте COVID-19
https://www.who.int/infection-prevention/campaigns/clean-hands/WHO_HH-Community-Campaign_finalv3.pdf
Экстремальная жара и COVID-19
<https://www.ghin.org/heat-and-covid-19>

“We find GHHIN’s work useful on a daily basis and share it extensively with our partners and stakeholders.”

- Health Canada Heat Division 21.10.20

WHO GUIDANCE FOR CLIMATE RESILIENT AND ENVIRONMENTALLY SUSTAINABLE HEALTH CARE FACILITIES

partnerships to aid in these activities.

Box 10. Integration of the COVID-19 pandemic into heat-stress planning

In addition to dealing with climate change related health risks to the general population (such as heat stress), health workers and facilities will have to ensure that adaptation measures (e.g. heat-stress plans) integrate relevant current programmes and responses in a comprehensive way, rather than approaching climate change and health as a vertical programme.

The COVID-19 pandemic amplifies the health risks for the general population and health workers during extreme weather events. During hot weather for example, some groups – older people, persons with pre-existing health conditions, living in crowded or poor-quality housing – are susceptible to both COVID-19 disease and heat stress, which could add to the burden of health care facilities. Health workers may also be exposed to heat stress due to the use of personal protective equipment which may impede cooling. However, it is essential that health workers are protected from both infection and heat stress. Thus, crucial considerations for health services and systems in relation to heat stress safety and COVID-19 disease prevention include:

- Priority and focus by medical and public health workers on COVID-19 pandemic preparedness and response activities that may compromise the capacity of health services and systems to prevent and manage heat stress.
- Public fear of seeking health care during the COVID-19 pandemic that may result in preventable heat-related deaths.
- Heat stress that can present a range of symptoms similar to early COVID-19 disease symptoms.

Given the compound risks from heat stress and COVID-19 disease, it will be essential to integrate both considerations into awareness-raising communications, and strengthen coordination among decision makers. Communities and health services should update and review communications and heat action plans in a way that potential COVID-19 pandemic preparedness responses are properly integrated (such as physical distancing), and make periodic changes to these plans as the situation evolves. In these unprecedented circumstances, strategic and collaborative actions can significantly enhance community and health system resilience to prevent avoidable illness and death from hot weather during the COVID-19 pandemic.

Source: (89)

Capacity Building

Masterclass Series

Provide rapid, interactive learning of good science, practices, methods, tools for essential applications in heat health, taught by leading experts in the field. Four Masterclasses have been held so far, attended by **408** participants representing **~41** countries:

Setting Operational Thresholds for Heat Early Warning Systems

Innovating in Urban Planning and Governance for Heat Health

Economic Valuation of Heat-Health Impacts and Interventions

Developing an Effective Heat Health Action Plan for your City

2021

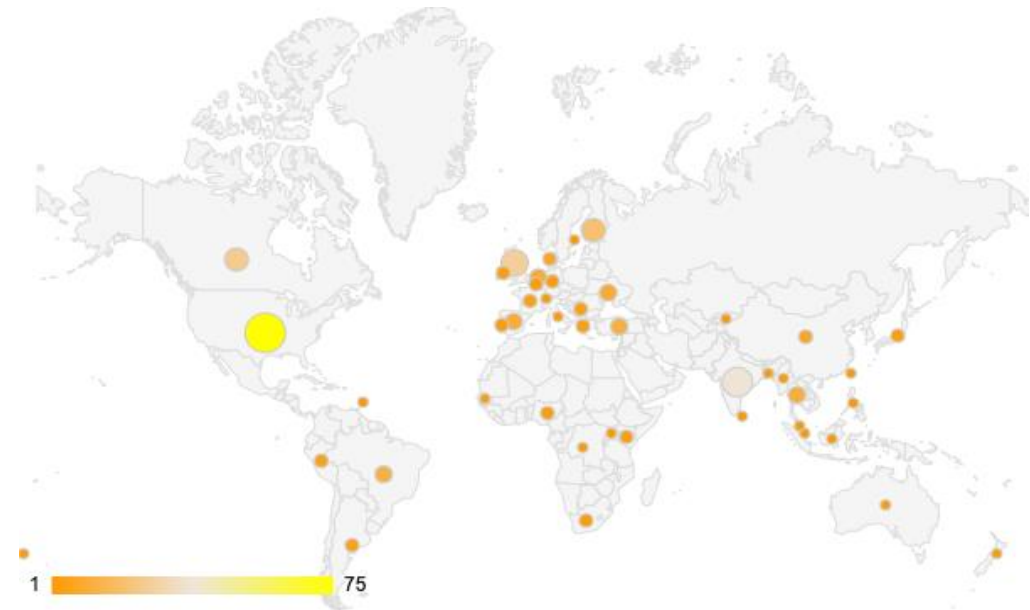
Collaboration with NASA-ARSET training

Urban Climate and Managing Heat Islands

Training Centers and Exchange

NOAA International Desk

DWD Training Center



INTEGRATED FRAMEWORK APPROACH AND PRIORITIES



Priority Needs of each pillar outlined



- 2021-2022 Activities**
- Regional Networks
 - Pilot projects
 - New partnerships and partnership campaign
 - Affiliated research
 - Affiliated technical products

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<https://ghhin.org/subscribe/>

Thank You