

International Labour Organization (ILO)

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April 2025

ILO drives action to safeguard the world of work from the effects of extreme heat through research, guideline development, collaborative efforts with tripartite constituents, and the promotion of a safe and healthy working environment.

The International Labour Organization (ILO) is devoted to promoting social justice and internationally recognized human and labour rights, pursuing its founding mission that social justice is essential to universal and lasting peace. As the only tripartite U.N. agency, the ILO brings together governments, employers and workers of 187 Member States, to set labour standards, develop policies and devise programmes promoting decent work for all women and men.

A safe and healthy working environment is recognized as a fundamental principle and right at work. The Occupational Safety and Health and Working Environment (OSHE) Branch is responsible for promoting the realization of this right and of a global culture of occupational safety and health prevention, including through addressing the impacts of extreme heat.

Lead Heat Entities:

Occupational Safety and Health and Working Environment Branch (OSHE), within the Governance and Tripartism Department

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KEY FACTS

Over 2 billion workers are exposed to excessive heat.

Globally, 2.41 billion workers, approximately 70% of the working population, are exposed to excessive heat. This results in 22.85 million non-fatal injuries, 18,970 deaths, and 2.09 million disability adjusted life-years (DALYs) attributable to excessive heat annually. Further, 9 out of 10 worker exposures to excessive heat, and 8 out of 10 occupational injuries linked to excessive heat, occur outside of a heatwave.

Heat at Work: Implications for safety and health

Occupational safety and health measured related to excessive heat could save over US \$361 billion globally.

Global GDP is generated by the global workforce. If a worker dies or experiences temporary or permanent incapacity for work due to exposure to excessive heat, the potential contribution of that worker to the GDP is lost. Additionally, treating injured workers incurs costs. Implementing occupational safety and health (OSH) measures prevents associated GDP loss at a large scale.

Heat at work: Implications for safety and health

Heat-related occupational injuries have risen 33 % in the Americas since 2000.

The Americas, along with the Europe and Central Asia region, were found to have the most rapidly increasing proportion of heat-related occupational injuries since the year 2000, with increases of 33.3% and 16.4% respectively. This may be due to quickly increasing temperatures in mildly temperate regions, where working populations are largely not acclimated to periods of excessive heat.

Heat at work: Implications for safety and health

26.2 million people worldwide are living with chronic kidney disease attributable to heat stress at work.

The disease burden of chronic kidney disease attributable to excessive heat was highest in Asia and the Pacific, with 20.8 million cases, followed by Africa, with over 2 million cases.

Heat at work: Implications for safety and health

Global Heat Occupational Safety and Health (OSH) Management

The ILO supports the development and implementation of resilient Occupational Safety and Health (OSH) management systems to address risks in the working environment, including those posed by extreme heat. OSH management systems are designed to function at both the national and enterprise levels, ensuring comprehensive strategies for preventing and managing the growing risks associated with heat exposure in workplaces. Through this approach, the ILO aims to operationalize fundamental OSH standards, promote worker safety, health and well-being, and foster sustainable adaptation at the workplace level.

Core Partners: ILO Member States, ILO social partners (the International Trade Union Confederation (ITUC) and the International Organisation of Employers (IOE))

ILO's Vision Zero Fund

ILO's Vision Zero Fund, supported by the G7 and endorsed by the G20, aims to eliminate severe or fatal work-related accidents, injuries, and diseases within global supply chains. Administered by the ILO, the Fund implements projects aimed at enhancing workplace safety. In 2002, the G7 tasked the fund to address the impact of climate change on OSH. In Mexico, the Fund is working with the University of Colorado and the Mexican Institute for Social Security to establish a methodology to measure heat exposure and heat stress among greenhouse workers in the tomato and chili pepper sectors. This initiative includes stages of assessment and adaptation design.

Core Partners: University of Colorado, Mexican Institute for Social Security, United States Department of Labor

Global Awareness Raising on Emerging Risks

Every year, the ILO commemorates the World Day for Safety and Health at Work on the 28th of April, focusing on a timely topic related to emerging OSH risks, with the 2024 edition focusing on climate change. The ILO produced a global report "Ensuring safety and health at work in a changing climate", a report at a glance, various promotional materials, relevant resources and press releases. Furthermore, the ILO organizes global dialogues on the topic, with experts, employers, workers and other guests discussing how to address the impacts of climate change on occupational safety and health.

Core Partners: ILO member States, ILO social partners (the International Trade Union Confederation (ITUC) and the International Organisation of Employers (IOE))

Tripartite Collaboration for Heat Solutions

As the only tripartite UN agency, the ILO brings together its tripartite constituents—governments, employers, and workers — to identify and implement sustainable OSH actions for managing risks in the world of work, including those posed by extreme heat. By fostering dialogue and joint action, the ILO aims to implement effective, scalable methods to protect workers' health and safety, while ensuring the resilience and sustainability of workplaces globally.

Core Partners: ILO member States, ILO social partners (the International Trade Union Confederation (ITUC) and the International Organisation of Employers (IOE))

Going Forward: Priority Areas for ILO Action

- Development and strengthening of mechanisms for surveillance, recording and notification of morbidity and mortality related to excessive heat in the working environment.
- Creation of a global database to track OSH laws, regulations and policies related to heat.
- Development of resources for integrating excessive heat into OSH management systems, including risk assessments, practical action checklists and mitigation measures, as well as sector-specific resources for high-risk industries such as agriculture, construction and manufacturing, and beyond.
- Creation of tailored resources specifically for Micro, Small and Medium-sized Enterprises (MSMEs) and the informal economy.
- Organization of tripartite meetings to review and discuss national legislation on excessive heat management and OSH.
- Strengthening ILO engagement in global processes related to climate change, environment, chemicals and pollution to ensure labour concerns are considered.
- Encourage and reinforce intergovernmental collaboration between ministries of labour, health and environment.

HEAT RESOURCES



Foundational documents governing institutional heat activities

ILO Global Strategy on Occupational Safety and Health 2024-2030 and plan of action for its implementation

This strategy includes mention of challenges and opportunities in the changing world of work, including climate change and a just transition.

Fundamental OSH Conventions

- Occupational Safety and Health Convention, 1981 (No. 155) and its Recommendation (No. 164)
- Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) and its Recommendation (No. 197)

Relevant Conventions for Protecting Workers from Excessive Heat at Work

- Hygiene (Commerce and Offices) Convention, 1964 (No. 120)
- Safety and Health in Agriculture Convention, 2001 (No. 184), Recommendation (No. 192)
- Safety and Health in Mines Convention, 1995 (No. 176), Recommendation (No. 183)
- The List of Occupational Diseases Recommendation, 2002 (No. 194)
- Protection of Workers' Health Recommendation, 1953 (No. 97)
- Employment and Decent Work for Peace and Resilience Recommendation, 2017 (No. 205)



SUPPORTING THE SDGs, INCLUDING:



This heat action profile was developed by the [Global Heat Health Information Network](#) in partnership with the World Meteorological Organization (WMO) and the UN Office for Disaster Risk Reduction (UNDRR), as a contribution to the [United Nations Secretary-General's Call to Action on Extreme Heat](#) (2024). The content was validated by focal points from the profiled international organization / agency, and captures a snapshot of its heat work at the time of publication. The profile will be periodically updated.

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