



Doc. 015-25

The Advisory Committee on Safety and Health at Work

Opinion

Climate Change – heat at work

Adopted on 10/12/2025

The Advisory Committee on Safety and Health at Work (ACSH)

HAVING REGARD TO:

- The EU “Strategic framework on health and safety at work 2021-2027 - Occupational safety and health in a changing world of work” focuses on three crosscutting key objectives for the period and among them on anticipating and managing change in the new world of work brought about by the green, digital, and demographic transitions as well as on improving prevention of workplace accidents and illnesses.
- The EU Occupational safety and health (OSH) stocktaking summit, held in Stockholm on 15-16 May 2023, has identified climate change as “ongoing growing OSH issues that need intensified further consideration”.
- The relevant EU legal framework on OSH and, in particular, directives 89/391/EEC (Framework Directive), 89/654/EEC (Workplace Directive), 92/57/EEC (Construction Sites Directive), 92/91/EEC & 92/104/EEC (Extractive Industries Directives), 93/103/EC (Fishing Vessels Directive) and 89/656/EEC (Personal Protective Equipment [PPE] Directive).
- The EU OSH legal acquis, including the following articles of the Framework Directive 89/391/EEC:
 - Article 2 (Scope), which indicates that “*This Directive shall apply to all sectors of activity, both public and private (industrial, agricultural, commercial, administrative, service, educational, cultural, leisure, etc.)*”.
 - Article 5 (General provision) which mentions that “*The employer shall have a duty to ensure the safety and health of workers in every aspect related to the work.*”
 - Article 6, where it states that “*(...) the employer shall take the measures necessary for the safety and health protection of workers, including prevention of occupational risks (...).*”

- The mandate of the ACSH Working Party "Climate Change and OSH" adopted on 29/11/2023. In this mandate, as a first step, the Working Party is requested to prepare a draft opinion for adoption by the ACSH in 2024 in the context of extreme weather conditions such as heat waves, including the exposure to ozone and solar UV-radiation.
- The Opinion "Climate Change – extreme weather conditions" (Doc. 016-24) adopted by the ACSH on 27/11/2024 which states that "*The Working Party has been discussing possible gaps in the legal framework at EU level, (...). However, the work could not be finalized within the given timeframe. (...) The Working Party will continue this work in 2025 with the aim to provide further recommendations to the Commission as needed, based on a common, consensual approach.*" The ACSH reiterates the importance of following its further expectation stated in 2024 opinion that "*Eurostat data as well as other official indicators of the progress of actions taken and their results should be developed in order to follow-up the improvements and effectiveness of such actions.*"
- The Opinion on the Update of the Workplace Directive 89/654/EEC, adopted by the ACSH on 27 November 2024.

ADOPTS THE FOLLOWING OPINION:

1. BACKGROUND AND CONTEXT

Europe's warming trend is materially increasing the frequency and severity of workers' exposure to heat and associated health and productivity impacts across all regions of the European Union (EU).^{1,2} Recent evidence indicates that European workers face rapidly increasing exposure to heat alongside rising heat-related occupational injuries.³ While fatal occupational injuries related to heat are currently estimated to be twice as high in Southern Europe, Central and Northern Europe have experienced an increase exceeding 50% over the past two decades.³ At the same time, heat exposure leads to significant productivity losses in many sectors⁴ with documented macroeconomic implications for the EU.⁵ Therefore, the risk posed by heat exposure is a serious EU-wide concern.

The ACSH recognises that "*heat is the largest and most urgent climate change related risk for human health. Heat exposure can pose significant risks to the safety and health of workers, particularly those engaged in outdoor or physically demanding jobs. Heat stress reduces labour productivity, as workers reduce their pace of work under heat stress, take more breaks and their error rate increases leading to injuries from workplace accidents.*"⁶

¹ WMO. State of the Climate in Europe 2022. Report No. 1320. Geneva, Switzerland: World Meteorological Organization; 2023.

² EEA. Climate change as a threat to health and well-being in Europe: focus on heat and infectious diseases. EEA Report No 07/2022. Copenhagen, Denmark: European Environment Agency; 2022.

³ ILO. Heat at Work: Implications for Safety and Health. A Global Review of the Science, Policy and Practice. in: Flouris A.D., Graczyk H., Nafradi B., Scott N., eds. Geneva, Switzerland: International Labour Organization; 2024.

⁴ Ioannou, L.G.; Tsoutsoubi, L.; Mantzios, K.; Gkikas, G.; Agaliotis, G.; Koutedakis, Y.; Garcia-Leon, D.; Havenith, G.; Liang, J.; Arkolakis, C.; Glaser, J.; Kenny, G.P.; Mekjavić, I.B.; Nybo, L.; Flouris, A.D. The impact of workplace heat and cold on work time loss. *J Occup Environ Med* 2025.

⁵ Garcia-Leon, D.; Casanueva, A.; Standardi, G.; Burgstall, A.; Flouris, A.D.; Nybo, L. Current and projected regional economic impacts of heatwaves in Europe. *Nat Commun* 2021;12:5807.

⁶ Advisory Committee on Safety and Health at Work. Opinion: Climate Change – extreme weather conditions (Doc. 016-24). Adopted on 27/11/2024 (<https://circabc.europa.eu/ui/group/cb9293be-4563-4f19-89cf-4c4588bd6541/library/f1cb742e-1c05-482c-be79-f2065cd3c054/details>; accessed: 13/9/2025). Brussels, Belgium: Working Conditions and Social Dialogue, DG Employment, Social Affairs and Inclusion. European Commission; 2024.

Current EU occupational safety and health (OSH) legislation recognises heat at work as a risk. For example, the Workplace Directive (89/654/EEC) stipulates that "*the temperature in rest areas, rooms for duty staff, sanitary facilities, canteens and first aid rooms must be appropriate to the particular purpose of such areas*". Therefore, heat exposure is recognized in principle, but current EU OSH law does not specify the measurable triggers and physiological safeguards needed to control this hazard.

The ACSH recognises that "*the state of protection in Europe from occupational risks associated with heat and heat stress needs to be improved. The aspects of harmonization and equal treatment of any worker is quite important.*"⁶

As stated in the Opinion "Climate Change – extreme weather conditions" (Doc. 016-24) adopted by the ACSH on 27/11/2024, Member States approach the issue of heat stress at work differently and there is no Directive at EU level.

The ACSH Working Party "Climate Change and OSH" has also been discussing possible gaps in the legal framework at EU level, providing "*specific criteria included in recent information presented and agreed upon in the Working Party. Such criteria include risk assessment, identification of vulnerable worker groups, use of heat stress indicators, hydration strategies, rest, breaks or modified work schedules, provision of cool, shaded and ventilated rest areas, heat acclimatization measures, health surveillance (including regular medical check-ups), workers' awareness and training and others like adequate sanitation facilities.*"⁶

2. INTRODUCTION

2.1. Process followed by the WP

In 2025, the WP "Climate change and OSH" met 17 March, 15 April, 12 and 26 May, 8 September, 8 October, 20 October, 24 October, 3 November. A drafting subgroup on heat at work was created and met eight times in 2025 (28 April, 21 May, 18 July; 2, 12 and 23 September, 20 and 24 October).

During these meetings, the drafting group members analysed the potential legislative gaps.

2.2. Conclusions of the analysis for potential legislative gaps

The Working Party performed an assessment of the EU OSH Directives against the specific criteria for protection of workers from heat exposure provided by the ACSH Working Party, **Error! Bookmark not defined.** outlined in section 1 above⁶.

Based on their common findings from analysing the relevant EU legislation, the ACSH recognises the following:

1. Few EU OSH Directives contain heat-related provisions, and these are predominantly general OSH provisions.
2. Two heat at work topics are not addressed in EU law: (1) use of heat exposure indicators and (2) acclimatisation to heat.
3. Two heat at work topics are partially addressed in EU law: (1) hydration strategies as well as (2) rest, breaks or modified work schedules; the latter appear without any link to heat or a heat-related indicator.
4. Seven heat at work topics are fully addressed (via general OSH provisions): (1) risk assessment, (2) identification of vulnerable worker groups, (3) provision of cool, shaded and ventilated rest areas, (4) personal protective equipment (PPE) designed for heat exposure, (5) health surveillance (including regular medical check-ups), (6) workers' awareness and training, as well as (7) sanitation facilities.

5. EU OSH Directives rarely use explicit heat terminology. No Directive uses the term “heat stress”. Existing Directives do not include any heat exposure indicator or thresholds.
6. EU OSH legislation includes provisions such as on risk assessment and information/training. Specific actions, to be determined according to the characteristics of the activity and processes fall within the responsibility of the employer. Engineering or indicator-triggered controls are not specified regarding heat stress.
7. The PPE Directive, as recently modified, contains specific provisions on thermal and radiation risks, particularly in relation to thermal burns.

3. RECOMMENDATIONS

The ACSH notes that heat exposure is a growing OSH challenge across the Union and recognises that the existing OSH legislation contains important general duties relevant to the protection of workers from heat (risk assessment, information/training, protection of sensitive groups, PPE). At the same time, practical implementation should avoid duplication, and include SME-friendly templates and phased timelines. In addition, it would benefit from clearer, measurable triggers and guidance so that employers and inspectorates can act consistently across sectors, including outdoor and mobile work.

The ACSH recommends that the following aspects be further addressed at EU level to strengthen the protection of workers from heat at work:

- a) Identification of indicators or methodologies for the assessment of exposure to heat (e.g., WBGT or an equivalent scientifically validated indicator) with work-intensity levels of metabolic rate.
- b) Acclimatisation of workers to heat at work to ensure progressive adaptation, for new or returning workers, sector/task- specific and supported by EU-OSHA guidance.
- c) Hydration strategy for workers, during periods of high heat exposure: easy access to potable water and hydration arrangements appropriate to heat exposure and work intensity.
- d) Work organisation linked to the heat exposure as referred to in (a) that includes proportionate measures (e.g. rest breaks, self-pacing, task rotation, time-of-day shifting), with sectoral flexibility and attention to productivity

4. FURTHER EXPECTATIONS

The ACSH examined different options for implementing the above-mentioned aspects but did not reach agreement on the most suitable approach. The individual Interest Groups are considering the following points of view and observations:

Employer Interest Group:

Based on the above analysis and recommendations, the EIG recognises that the Framework Directive and the other EU OSH Directives address all risks related to heat exposure due to climate change and have proven adequate over all these years and considers the most suitable approach is a non-binding instrument, specifically a technical EU-guidance or a Recommendation of the Council.

Government Interest Group:

Based on the above analysis and recommendations, the GIG recognises that the legislative gaps identified in Section 2 are structural and may be addressed in binding legal instruments in the form of an OSH Directive of minimum requirements to protect EU workers from heat exposure and a technical EU-guidance.

Workers Interest Group:

Based on the above analysis and recommendations, the WIG recognises that the legislative gaps identified in Section 2 are structural and must be addressed in binding legal instruments in the form of a dedicated OSH Directive of minimum requirements to protect EU workers from heat exposure.

5. CONCLUSIONS

The ACSH strongly recommends the Commission to follow the recommendations stated in this opinion.