

Heatwaves and OHS: climate change and prevention systems in Italy

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Fondazione Di Vittorio

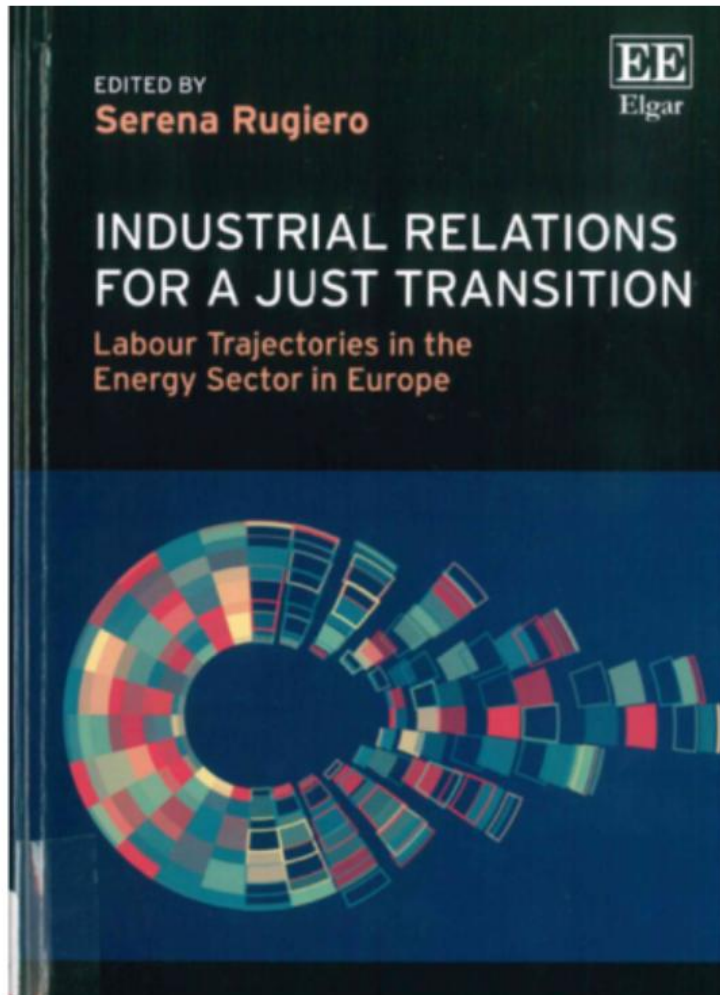


TURI / ETUI - Warsaw - October 20 2026

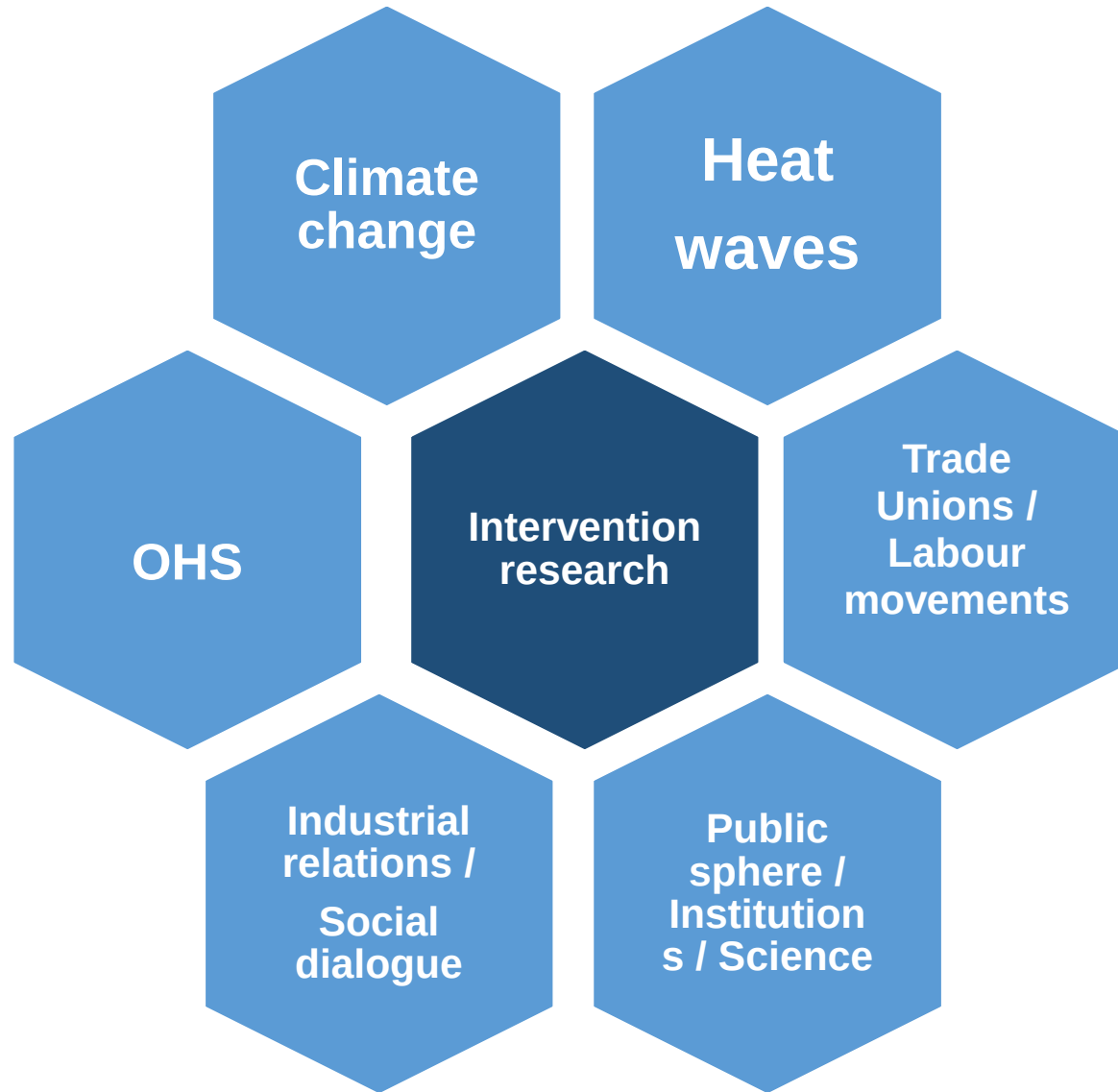
European Projects



TansFormWork2



MAIN TOPICS



Heatwaves as an occupational hazard

The impact of heat and heatwaves
on workers' health, safety
and wellbeing and on social
inequalities

Claudia Narocki

Report 2021.06

etui.

EUROPEAN PROJECTS

Adaptheat – Adaptation to heat and climate change at work

Funded by the European Commission (2023-2025)

Fundación 1º de Mayo (Spain) (project coordinator)

Fondazione Di Vittorio-FDV (Italy)

Hellenic Institute for Occupational Health and Safety-ELINYAE (Greece)

Stichting VU de la Vrije Universiteit Amsterdam-VUA (Netherlands)

Magyar Szakszervezeti Szövetség-MASZSZ (Hungary).

In collaboration with: ETUI, Complutense University of Madrid, CGIL



COLLABORATORS



Funded by the European Union. Views and opinion expressed are however those of the authors only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them



Climate change, heatwaves and psycho-social risks

EU-OSHA (2026-2027)

Fundación 1º de Mayo (Spain)
(project coordinator)

Fondazione Di Vittorio-FDV (Italy)





ETUI-ETUC conference
**Climate change
and workers' health**

28 April 2026

CONFEDERATION
SYNDICAT
EUROPÉEN
TRADE UNION

etui.

Climate change and workers' health

Protecting workers against heat
and other climate-related hazards

Marouane Laabbas-el-Guennouni
and Andreas D. Flouris

Report 2026.07

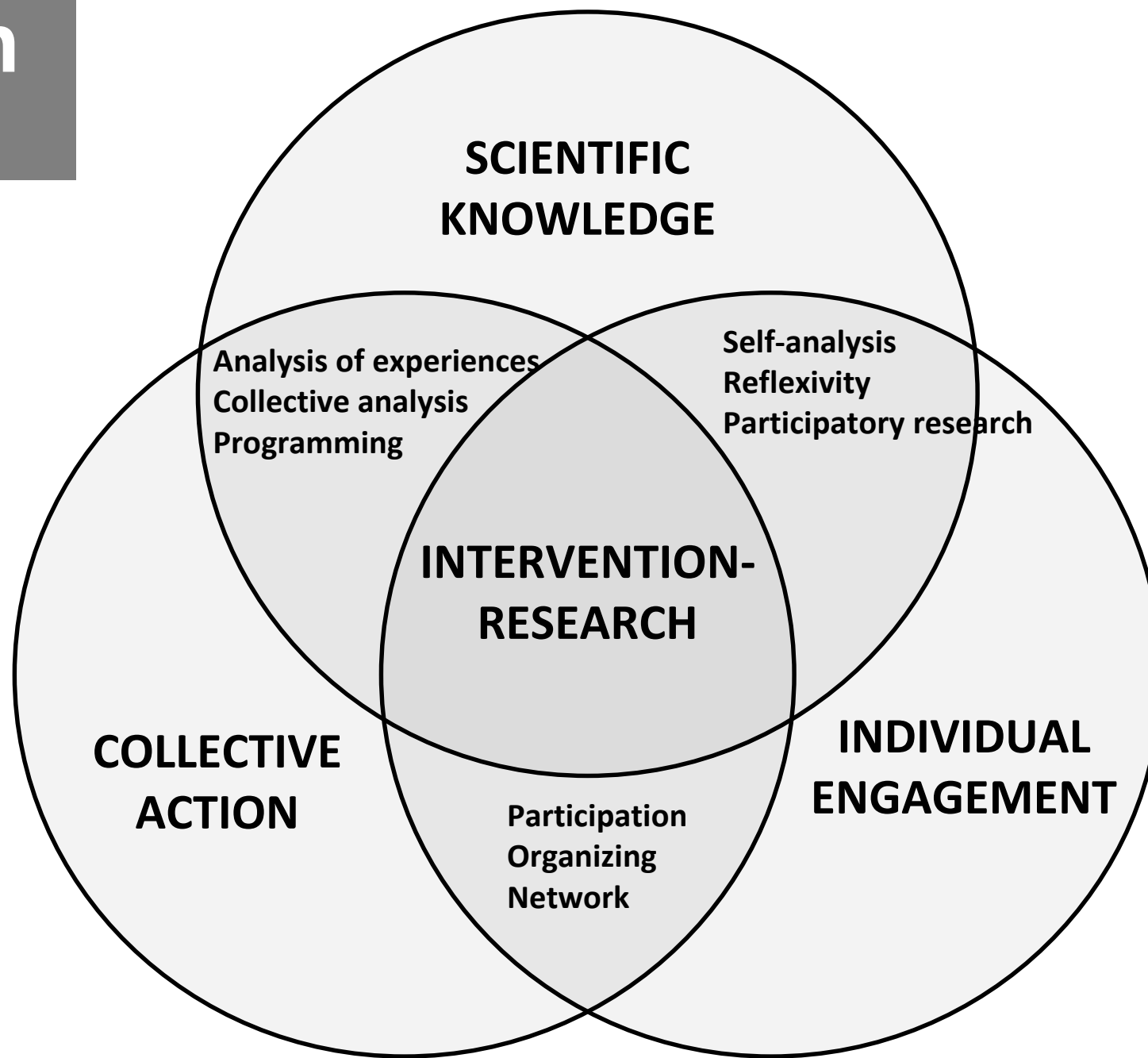
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EUROPEAN FEDERATION OF
FOOD, AGRICULTURAL, AND TOURISM
TRADE UNIONS

 **EPSU**
EUROPEAN PUBLIC SERVICE UNION

 EUROPEAN
FEDERATION
OF BUILDING AND
WOODWORKERS

etui.

Intervention Research



Source: Di Nunzio & Toscano 2025; Di Nunzio 2022.

THEORETICAL FRAMEWORK

Scientific debate on climate change and health:

- Just transition and industrial relations (Galgóczy 2022; Rugiero 2026)
- The medium- and long-term consequences of climate change (Marx et al., 2021; Guo et al., 2018)
- Risks and impacts on the health and safety of the population (Raymond et al., 2020; Peng et al., 2011)
- OHS risks at work (Flouris et al., 2024; Gariazzo et al., 2023; Foster et al., 2022, 2020; Xiang et al., 2014)
- Monitoring systems and institutional measures to mitigate OHS risks (Zuo et al., 2015)
- Heatwaves and workers' health (ETUI: Narocki 2021; Laabbas el Guennouni and Flouris, 2026)

In Europe and Italy, among all extreme climate events, heatwaves are the most urgent issue to address because they are responsible for a growing number of deaths and occupational injuries (Narocki, 2021).

Extreme heat has shifted from an emergency phenomenon confined to the summer months to a constant and more frequent condition throughout the year: a **structural problem requiring permanent solutions** to protect the workforce (Cefaliello, 2023).

There is a knowledge gap:

- on the **health risks** of heatwaves and the **immediate measures to be adopted and health consequences**, while the just transition paradigm focuses on long-term effects and solutions.
- on the **role of social actors (social dialogue/industrial relations) in prevention systems** for extreme-heat risks (Tannock, 2024), to protect workers' health and, more broadly, ensure decent working conditions;

NATIONAL PROJECTS ON CLIMATE RELATED RISKS: ITALY

Intervention-Research Program

- Conference with scientific community and trade unions at national and regional level
- Interviews and focus group
- Participation to trade union councils and meeting
- Training
- Local Survey in Lazio Region: Check list and monitoring tools for OHS representatives



June 12 2024

FDV Conference at INAIL with
CGIL: National OHS Union Network

HEALTH PROTECTION: ROLE OF THE SOCIAL ACTORS

The establishment of occupational health risk prevention for extreme heat/climate change related risks is the outcome of a long-term process shaped by multiple factors and social actors.

1. Climate change and awareness (public sphere)

Rising temperatures, related illnesses among the population, occupational injuries

2. Scientific community

The role of the scientific community in providing evidence and contributing to the functioning of prevention systems.

3. Trade union action, protests and collective bargaining

Trade union pressure through mobilisation and proposals, followed by agreements and protocols.

4. Institutions

A proactive role for institutions in seeking to build national and local coordination mechanisms to prevent heatwave risks and to control the working conditions.

A 20-YEAR JOURNEY: ROLE OF INSTITUTIONS AND SCIENTIFIC COMMUNITY

NO DATA – NO PROBLEM – NO ACTION

1956–1959: first references to the relationship between workplace temperature and OHS impacts in Presidential Decree 320/1956 (underground activities) and Presidential Decree 128/1959 (mines and quarries);

2003: first major European heatwave in terms of number of deaths;

2004: the Presidency of the Council of Ministers approved the “Operational guidelines for the organisational and functional management of the national, state and regional warning system for hydrogeological and hydraulic risk”; the following were established: the “Heat Lab” by the Italian National Institute of Health (ISS) and the National Centre for Disease Prevention and Control (CCM), and the “National Heatwave Portal and local heat-health warning system (HHWWS)” for weather forecasts by the Epidemiology Department of the Lazio Regional Health Service;

2008: the Consolidated Act defines the characteristics of healthy workplaces (Annex IV) and explicitly links microclimatic conditions (1.9) to workers’ OHS, considering ventilation of enclosed spaces (1.9.1), workplace temperature (1.9.2) and humidity (1.9.3);

2016: European “Heat-Shield” project and first INPS circular (no. 139) on wage supplementation for temperatures of 35°C or above;

2019: Italian “Workclimate” project (INAIL – CNR)

2021–2023: National Labour Inspectorate (INL) notes on “Protection of workers under heat-stress conditions and from the risk of heat-related injuries”;

2023: Decree-Law no. 98/2023 containing “Urgent measures for the protection of workers in the event of extreme weather conditions”;

2025: adoption of regional ordinances and a National Protocol between the Ministry of Labour and the social partners

ROLE OF THE TRADE UNIONS AND SOCIAL DIALOGUE

Year	Territory	Type and scope of application	Main prevention measures
2016	[Workers' struggles] Nardò (Apulia/Puglia)	Municipal ordinance issued by the Mayor, agricultural sector	Suspension of activities 12:30–16:00; reference to national temperature bulletins
2021	Apulia Region	Regional ordinance (President of the Region), agriculture	Suspension 12:30–16:00 (23 June–31 August); use of the Workclimate risk map
2025	Genoa (Liguria)	Tripartite protocol (Region, Municipality, OHS institutions, employer organisations and trade unions), all sectors	Reference to the Workclimate map and institutional website; work organisation, information and training, hydration and acclimatisation, appropriate clothing, breaks and involvement of Workers' Safety Representatives (RLS)
2025	All Regions and Autonomous Provinces	Interregional guidelines (Conference of Regions), all sectors	Workclimate map; HI and WBGT indices; rescheduling of working hours, acclimatisation, rest areas, hydration, training and health surveillance
2025	Italy (national)	National protocol (Ministry of Labour and social partners), all sectors	Social safety nets, PPE, training, inspections, shift rescheduling, shaded areas, water, heat-risk assessment in DVRs, territorial bargaining forums

REGIONAL DECREES IN ITALY (2023-2026)

Regions	Sectors	Time restrictions	Other measures and notes
Calabria, Abruzzo, Umbria, Sardegna	Outdoor: agriculture, horticulture, construction	12:30–16:00 (June–August); Workclimate map	Standard application with no additional measures
Campania, Lazio, Toscana, Marche, Piemonte	Outdoor: agriculture, construction, quarries (logistics)	12:30–16:00 (June–September); Workclimate map	Reference to the Guidelines of the Conference of Regions
Emilia-Romagna, Lombardia, Veneto, Liguria, Friuli Venezia Giulia	Outdoor (indoor without adequate ventilation)	12:30–16:00 (July–September); Workclimate map	Organisational measures (rotation, shading, breaks, consultation with RLS)
Puglia, Basilicata, Sicily, Molise	Outdoor: agriculture, construction, logistics	12:30–16:00 (June–September); Workclimate map	Ban on work in direct sunlight; bilateral bodies; time exemptions for evening work
Provincia autonoma Trento	Outdoor e indoor (industry)		
Trentino, Valle d'Aosta	–	–	Indication for preventions

Municipal directives/guidance
Company-level agreements

PREVENTION: COMPANY LEVEL

- Include heatwaves as a risk to be assessed in the Risk Assessment Document (DVR), as required by Legislative Decree 81/08, providing specific guidance for management and prevention (outdoor and indoor).
- Consider different factors: specific work activities (occupations and tasks); working conditions (physical exertion, long hours, lone working, etc.); individual characteristics (medical conditions; other vulnerabilities).
- **Health surveillance and preventive medical examination (assessment of fitness for the specific job).**
- Disseminate **information** and provide specific **training** for workers, Workers' Safety Representatives (RLS) at company, site and territorial level, employers and managers (e.g. how to monitor workplace temperatures, assess risk conditions for the workforce, and evaluate organisational adjustments considering health and safety risks due to actual/perceived temperatures or linked to different phases of work activity, etc.).
- Implement continuous and joint temperature monitoring, involving RLS, managers and local institutions.
- **Avoid financial losses for workers (regardless of employment status: temporary, permanent, self-employed, etc.) and other penalties (such as requiring them to make up hours not worked).**

PREVENTION: COMPANY LEVEL

- **Reschedule working hours** to avoid work during the hottest hours (particularly between 12:00 and 16:00).
- Increase the number and duration of **work breaks**.
- **Reschedule work activities** (plan activities throughout the day according to the extreme temperatures).
- Introduce **job rotation** for workers carrying out outdoor tasks.
- Use appropriate **personal protective equipment (PPE)** (workwear, boots, hats, sunscreen and UV-radiation protection, sunglasses, wearable IT devices, etc.), differentiated according to context (e.g. season, type of activity) and individuals.
- Ensure the availability of **water and shaded rest areas**.
- **Reorganise and innovate workplaces by creating shaded areas** (e.g. fixed and mobile canopies/covers, screened cabins), **adopting technologies** (e.g. industrial fans, misting systems) **or improving building energy efficiency**.
- **Reorganise workspaces/routes** (making maximum use of shaded areas created by trees/buildings).

GENERAL RECOMMENDATIONS (Sectoral/National/European level)

HEAT-STRESS MANAGEMENT

- **Information campaigns** on heatwave risks/climate change risks and organisational practices to prevent them.
- **Clear formal procedures for preventing heat stress** (starting from the application of scientific parameters such as WBGT).
- **Monitor workers' use of appropriate PPE** according to sector, activity and individual characteristics.
- Strengthen **inspection systems**.
- Extend and strengthen **mutual-support mechanisms** (wage supplementation) to reduce the economic costs to employers and workers caused by the suspension of activities.
- Strengthen **cooperation among institutions, social partners and the scientific community** to define, implement and monitor heatwave-prevention systems, including through joint observatories and committees.
- **Strengthen systems for collecting scientific evidence on the relationship between occupational injuries, occupational diseases and heatwaves.**
- Develop a specific **European directive** to protect workers from heatwaves/climate change OHS risks through a preventive rather than emergency-based approach, complementing Directives 89/391/EEC and 89/654/EEC.

INDUSTRIAL RELATIONS AND SUSTAINABLE DEVELOPMENT

- **Strengthen the relationship between prevention systems and industrial relations systems to avoid fragmented protection: heat-stress risk is related to other risk factors and vulnerabilities in working conditions (e.g. precarious and irregular work).**
- **Strengthen the role of OHS Representatives and prevention systems**, using an extensive and inclusive approach to address the fragmentation of value chains, particularly for small enterprises, through site-level, territorial and supply-chain bargaining.
- **Integrate heatwave risk into policies promoting a just transition**, so as to consider both long-term and immediate risks caused by climate change and connect environmental issues with social issues.

TRADE UNION ACTIONS - Summer 2026



NIDIL CGIL Padova – July 2026
Riders
(Source: Rainews)

CGIL Roma-Lazio - FDV: SURVEY

- **Survey by Check-List during summer 2026**

Monitoring with Workers' OHS Representatives in 24 companies (with outdoor and indoor exposure to heat; all sectors; big companies) to analyse the use and evolution of preventive practices.

- **Focus-group (n. 2)**

June and September 2026 with OHS Representatives

- **Analysis of the «SOS heatwaves at work**

Regional Trade Union «call center» for the heatwaves:

Reports of risks and problems; union interventions “on demand”

56 forms filled by the unionists from the phone calls

CGIL Roma-Lazio – FDV

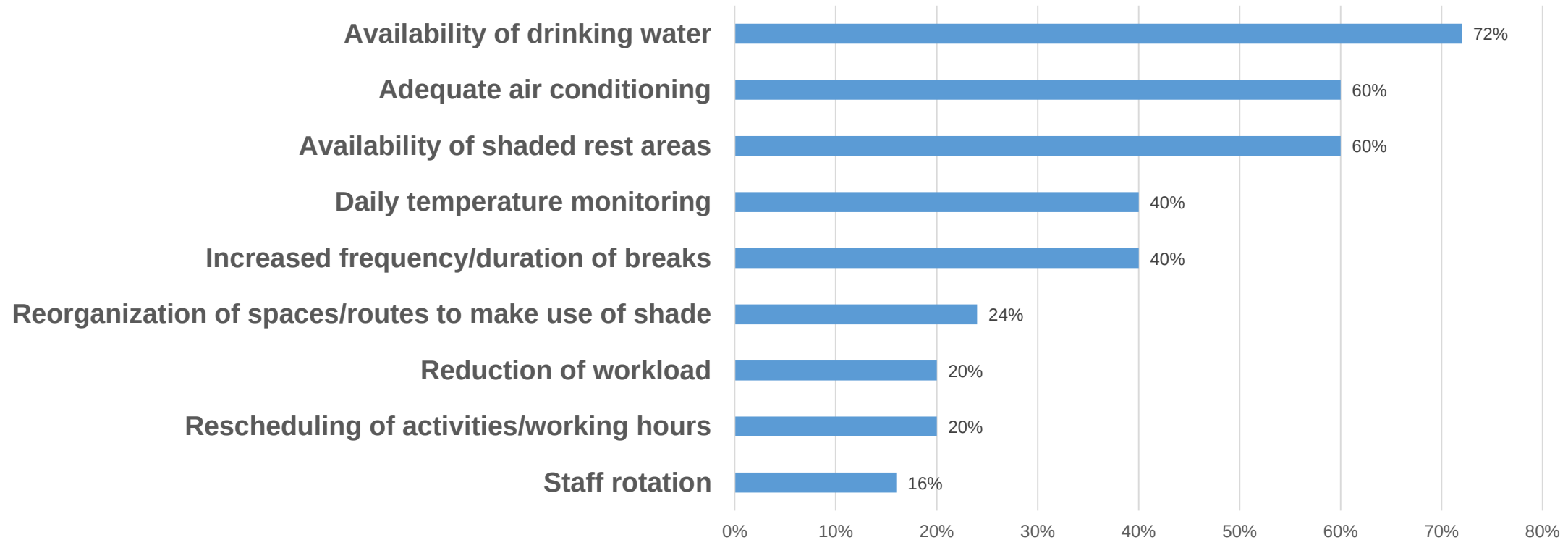
May 6 2026 - Trade Union Assembly - OHS Representatives - CGIL Roma-Lazio



Source: CGIL Roma e Lazio

CGIL Roma-Lazio: SURVEY in the companies

Prevention OHS practices for heatwaves at company level



24 companies

Source: FDV – CGIL Roma e Lazio. Survey

CGIL Roma-Lazio: SURVEY

- ❑ **Block of the activities** during the hottest times of the day: 3 out of 24 companies:
- ❑ **Cases of heat-related illness at workplace level** (e.g. heatstroke, fainting, sunstroke, cramps, heat exhaustion/congestion, nausea, vomiting, etc.)
 - 1 case reported to INAIL (Italian Workers' Compensation Authority)
 - 2 cases NOT reported to INAIL

TRADE UNION ACTIONS: PHONE SUPPORT



EMERGENZA CALDO

Se ti chiedono di lavorare esposto al sole nelle ore più calde o al chiuso in locali non climatizzati, **non rischiare!**

Fai rispettare il tuo diritto alla salute e la sicurezza sul luogo di lavoro. Contattaci al numero verde gratuito!

800772322

ATTIVO DALLE 9:00 ALLE 19:00

CGIL
ROMA E LAZIO

Workers – Workers' Family - Citizens

About 100 calls.

56 forms filled out by trade unionists

With info on:

- Name
- Company
- Sector
- Problems and interventions

Mansione/attività	Cuoco
Azienda (per la quale lavora)	Ristorante Centro di Roma
Committente/appalto(se lo dice)	
CCNL applicato	Ristorazione

Tipo caso: Caldo ☒ Altro SSL ☐ Altro ☐

Descrizione del caso

Cuoco di 64 anni. Denuncia situazione di temperature elevate in cucina con tasso elevato di

umidità. Dice che lui e i colleghi sono loro no.

NON ESCLUDO POSSA ESSERSI

Ho spiegato che al di là dell'ordinario, redigere il tutto in un documento con sostanze, scivolamento e caduta microclima e predisporre misure (as secondo turni adeguati.

Ha detto che lui e i suoi colleghi avrebbero Potrebbe richiamare e gli ho detto di dare il nome dell'azienda.

Mansione/attività	CITADINA
Azienda (per la quale lavora)	IGDOTA
Committente/appalto(se lo dice)	IGDOTO
CCNL applicato	

Tipo caso: Caldo ☐ Altro SSL ☐ Altro ☐

Descrizione del caso

LA CHIAMAATA SI RIFERIVA AD UN
A LAVORO DURANTE L'ORARIO
SEGNALATO ALLA CATEGORIA
NOTA PRESSO IL CAUTIBES SU
LA CATEGORIA CONOSCEVA
DE E LE ATTIVITA' SVOLTE.

Source: CGIL Roma Lazio

TRADE UNION ACTIONS: PHONE SUPPORT

Construction, Worksites & Infrastructure	19	Construction work, fiber-optic excavation, roadworks, manual labor, waste disposal sites, and pipe laying.
Retail & Points of Sale	10	Shop assistants, cashiers, and sales staff in boutiques, department stores, and shopping centers.
Security & Concierge Services	6	Armed security guards, access control personnel at cultural sites, stations, and diplomatic missions.
Hospitality, Hotels & Kitchens	6	Chefs, cooks, kitchen assistants, and waitstaff for dining rooms/terraces in restaurants, fast-food outlets, and private clubs.
Transport, Cleaning & Industry	5	Train conductors, elevator technicians, window/terrace cleaners, quarry workers, and environmental services staff.
Entertainment, Culture & Media	3	Audio/lighting technicians for summer festivals, contracted television crews, and cabinetmakers/set designers.
Education	2	Teachers
Tot.	51	

Source: CGIL Roma Lazio - FDV



Information's for the meeting of Trade Union CGIL Roma Lazio with the Rome Municipality's Councillor for Labor

- Planning of the prevention system for the next summer 2027
- Consider the risks in the winter 2026

SOME RISKS REPORTED: ALL SECTORS

Construction

Subcontracted construction sites: workers were found laboring under the blazing sun during hours protected by a regional ordinance—completely lacking personal protective equipment and forced to work bare-chested due to the intense heat.

Transport

Critical issues affecting local and regional trains due to air-conditioning systems that are either broken or completely absent, causing physical distress to both staff and passengers.

Entertainment and big events sector

Employed by third-party service companies to prepare for large summer events, these workers face grueling shifts and solitary tasks, with workdays sometimes reaching 19 consecutive hours.

Hotels and restaurants

In the kitchens of restaurants, fast-food, and hospitality (including exclusive private clubs), extreme microclimatic conditions: internal temperatures have been recorded reaching as high as 45°C.

CGIL Roma-Lazio: CAMPAIGN



The protest by **CGIL** and **Greenpeace**: three ice statues - a farm laborer, a construction worker, and a delivery rider - left to melt in the sun.

July 15 2026

Source: Collettiva.it

PUBLICATIONS



- Di Nunzio D., Errico E., Working in extreme heat: how the scientific community and trade unions build knowledge about climate risks, *Sociologia del Lavoro*, no. 173, pp. 59–79. <https://www.francoangeli.it/riviste/articolo/citazione/?doi=10.3280/SL2025-173004>
- Errico E., Di Nunzio D., 2026, “Heatwaves and occupational health and safety in Italy: the role of trade unions and social dialogue”, *Industrial Health*, 64(1): 96–106. https://www.istage.jst.go.jp/article/indhealth/64/1/64_2025-0107/article
- Errico E., Di Nunzio D., Heatwaves and trade union action: towards a multi-level model for occupational risk prevention, *Economia e Società Regionale*, vol. 3, pp. 67–80, doi: 10.3280/ES2025-003005 <https://www.francoangeli.it/riviste/articolo/79507>
- Errico E., Di Nunzio D., Ondate di calore e salute e sicurezza sul lavoro: quale ruolo per il dialogo sociale? Evidenze a partire da studi di caso nel settore agricolo e nei magazzini della logistica in Italia, *Studi organizzativi*, n., 1., pp. 96-120. <https://www.francoangeli.it/riviste/articolo/80765>
- Errico E., Di Nunzio D., 2024, Extreme heat and occupational health and safety: the role of social dialogue. Results of the Adaptheat project for the Italian context, *Working Paper* no. 5, Fondazione Di Vittorio, Rome. <https://www.fondazionedivittorio.it/pubblicazioni/caldo-estremo-salute-sicurezza-sul-lavoro-ruolo-dialogo-sociale-risultati-progetto>

SURVEY RLS (OHS REPRESENTATIVES)

INCHIESTA RLS

Rappresentanza e sistemi di prevenzione
tra azienda, territorio e sito produttivo

A cura di

Raffaella Cagliano, Filomena Canterino,
Claudio Arlati, Daniele Di Nunzio,
Fabio Piacenti, Giuliana Buresti, Fabio Boccuni

FrancoAngeli

Survey:

**1,024 questionnaires OHS Representatives at
Company level**

152 questionnaires at territorial level

INAIL

Politecnico di Milano

Fondazione Giuseppe Di Vittorio

IAL Nazionale

EURES

CGIL, CISL e UIL.

THANKS

<https://www.fondazionedivittorio.it/it>

