

Bulletin n°35

Veille thermique

Période : mars 2026

Objectifs :

L'INRS est de plus en plus sollicité sur des questions concernant les activités en entreprise par forte chaleur : les activités en extérieur, l'été en période de canicule, mais aussi les activités en intérieur, dans des lieux aux conditions thermiques extrêmes. L'objectif de cette veille est de se tenir informé sur ces thématiques, dans une période où la problématique thermique croît avec les changements climatiques.

La bibliographie extraite de la base de données INRS-Biblio, permet la consultation des ressources en version PDF.

Les liens mentionnés dans le bulletin donnent accès aux documents sous réserve d'un abonnement à la ressource.

La validation des informations fournies (exactitude, fiabilité, pertinence par rapport aux principes de prévention, etc.) est du ressort des auteurs des articles signalés dans la veille. Les informations ne sont pas le reflet de la position de l'INRS.

Sommaire :

EPI, matériaux protecteurs/réchauffants.....	2
Maladies liées à la chaleur	4
Outils et capteurs de mesure	6
Travail par fortes chaleurs et périodes de canicule	7
Actualités mars 2026.....	10

EPI, matériaux protecteurs/réchauffants

J. Renberg, R. Kölegård, L. Klous, B. Kingma, C. Bourrilhon, S. Martini, R. Tanso and H. K. Teien.

Choice of cold weather combat clothing affects manual performance, body temperatures and comfort in a sub-Arctic climate.

INTERNATIONAL JOURNAL OF OCCUPATIONAL SAFETY AND ERGONOMICS. 2026.

<https://doi.org/10.1080/10803548.2026.2638064>

Appropriate clothing is important for maintaining operative capability during cold weather operations. This study examined the impact of different cold weather combat uniforms on body temperature, manual performance, comfort and perspiration among nine male soldiers (aged 24 +/- 4 years) in field conditions (-2 to 5 degrees C). They completed three trials, consisting of a 1-h walk at 5 km/h and 1 h passive standing, wearing uniforms with varying insulation levels (1.9, 2.2 and 2.5 Clo). The results show that uniform type and insulation significantly affect skin temperature, moisture accumulation and manual dexterity in mild sub-Arctic winter conditions. Results also indicate that the insulation and design of hand protection significantly influence hand and finger skin temperatures, which in turn affects manual performance, independent of overall clothing insulation. Finally, while models like required clothing insulation (IREQ) are useful for initial recommendations, individual adjustments are needed to maintain comfort and prevent cold weather injuries.

A. S. Weller and J. W. R. Boyd.

Cold Protection and Manual Performance Assessment of Aircrew Gloves.

AEROSPACE MEDICINE AND HUMAN PERFORMANCE. 2026;97(3):160-8.

<https://doi.org/10.3357/AMHP.6701.2026>

Military aircrew of rotary-wing aircraft often report cold and dysfunctional hands during cold-weather flying. Therefore, the cold protection and manual performance of in-service gloves was quantified in a laboratory study to support cold-weather advice to aircrew and glove procurement activities. METHODS: There were 8 civilian men who undertook a 60-min thermal test simulating the metabolic cost of rear crew physical tasks and wearing representative clothing on 15 occasions, where 3 main glove types (Cape leather, C; Cape + silk liner, C + s; Gunner, G) and 5 air temperatures (T-A; +20, +10, 0, -10, -20 degrees C) were assessed. Physiological (including mean finger skin temperature, T-FsK), subjective thermal, and manual performance (including bare-hand and gloved finger/ hand dexterity) measures were obtained. RESULTS: At a T-A of 0 degrees C, mean T(sKF) was 15.2 (C), 17.9 (C + s), and 22.4 degrees C (G). Finger cold discomfort occurred at a T-A of 0 degrees C in C, and at -10 degrees C in C + s and G. Gloved finger/hand dexterity was impaired relative to bare hands by 46/4 (C), 56/14 (C + s), and 73/44% (G). There was no relationship between T-sKF and dexterity performance. DISCUSSION: The performance of aircrew gloves has been baselined for male aircrew. Cape leather gloves are limited to a T-A of +10 degrees C. Adding silk liners and wearing the Gunner glove extended exposure down to a T(A) of 0 degrees C but imposed considerable impairment on dexterity performance. solutions are required to enhance cold protection at a lower cost to manual performance, which must demonstrate applicability to both male and female aircrew.

S. Kwon, S. Kwon, H. Lee and M. Subramaniam.

Effect of fabric covers on heat and moisture transfer in three-dimensionally printed TPU and EVA foams for clothing applications.

INTERNATIONAL JOURNAL OF INTERACTIVE DESIGN AND MANUFACTURING - IJIDEM. 2026.

<https://doi.org/10.1007/s12008-026-02527-3>

In this study, thermoplastic polyurethane (TPU) was three-dimensionally printed to develop foam structures for wearable applications. Ethylene vinyl acetate (EVA)-a conventional foam material widely used in cushioning systems-was used as a reference and combined with three-dimensionally printed TPU to form hybrid (EVA + TPU) structures. Although these polymeric materials offer design flexibility, their direct contact with the skin without appropriate cover fabrics may result in thermal discomfort, skin irritation, and restricted moisture dissipation. A total of 24 combinations-comprising three types of inner materials (three-dimensionally printed TPU, EVA, and EVA + TPU) and eight different cover fabrics-were tested to evaluate their thermal- and moisture-management performances. Among the uncovered samples, three-dimensionally printed TPU exhibited the highest temperature increase (5.2 degrees C), followed by EVA + TPU (3.9 degrees C) and EVA (2.9 degrees C). Among the covered samples, Ny + U1 fabric showed the highest temperature increase (4.7 degrees C), whereas the wool-covered sample showed the lowest (2.0 degrees C). Changes in the relative humidity (RH) showed a similar trend: uncovered TPU showed the greatest decrease (- 8.3% RH), followed by EVA (- 7.5% RH) and EVA + TPU (- 6.98% RH). Among the covered samples, EVA combined with Poly 3 fabric demonstrated the greatest humidity reduction (- 7.5% RH). These findings underscore the importance of selecting optimal combinations of inner-foam materials and fabric covers to enhance thermophysiological comfort in three-dimensionally printed wearable systems. [GRAPHICS]

Y. J. Li, Y. R. Wang, X. Tian and Y. Cheng.

Physiological and subjective responses across mask-wearing in a summer air-conditioned environment.

INDOOR AND BUILT ENVIRONMENT. 2026.

<https://doi.org/10.1177/1420326X261434132>

This study investigated the thermal comfort effects of surgical and N95 masks in a summer air-conditioned environment (23.0-28.0 degrees C) using a three-stage experimental design with 24 sedentary subjects. Physiological and subjective responses were measured during adaptation (Stage I), mask-wearing (Stage II) and post-removal (Stage III). Results showed that mask-wearing could significantly increase facial skin temperature in Stage II, leading to warm and humid discomfort, whereas facial thermal conditions recovered rapidly after mask removal and in slightly warm environments (28.0 degrees C), comfort levels exceeded those in the adaptation stage, indicating thermal adaptation. Core temperature and heart rate remained stable throughout, confirming that mask-related discomfort was primarily localized. Compared with surgical masks, N95 masks consistently resulted in lower thermal acceptability, with differences of up to 9.0%. Thermal analysis revealed that the overall neutral temperature increased from Stage I to Stage III, while the preferred temperature remained consistently lower than the neutral temperature. During mask-wearing, the acceptable facial temperature range shifted towards cooler conditions and expanded after mask removal, indicating enhanced thermal tolerance. Based on these findings, a facial thermal comfort prediction model was developed using nasal and chin skin temperatures, providing quantitative support for thermal comfort management and mask selection in summer air-conditioned environments.

Maladies liées à la chaleur

M. Zhang, B. Wang, D. Sun, X. Z. Chen, Y. N. Zhou, J. Yao, L. W. Du, Z. H. Zhang, H. Li, Z. Y. Qu, L. Chen, Q. Luo, J. Zhang, X. Y. Jin, X. W. Cheng, J. X. Niu, Q. R. Xing, X. Z. Tan, T. Wang, J. Liu, L. Li, Q. Song, X. M. Chen and Y. Z. Chen.

Combined single-cell transcriptome and immune repertoire analysis reveals hepatic and renal immune injury by heat stroke.

JCI INSIGHT. 2026;11(6).

<https://doi.org/10.1172/jci.insight.189825>

Heat stroke (HS) is the most severe heat-related emergency, and its pathophysiology remains largely unknown, especially for exertional HS (EHS), which affects younger populations, athletes, and manual workers. Herein, we performed single-cell-transcriptomics, T cell receptor sequencing, and flow cytometry of PBMCs from 9 healthy control participants, 9 patients with heat exhaustion, and 9 patients with EHS to explore complex immunological responses associated with HS pathobiology. We showcased that granzyme-positive T cells and CD56dim NKG2A⁺ cells with high cytotoxicity features and IL-1B+NLRP3⁺ monocytes with high inflammation and pyroptosis scores were enriched in HS, while the CD161⁺ T cells with innate immune-like, low cytotoxicity, and clonal expansion features were reduced in HS. Importantly, elevated granzyme-positive T and NKG2A⁺ cells might interact with monocytes to induce pyroptosis of hepatic and renal cells and target organ injuries, and blocking the NLRP3 inflammasome pathway prior to the induction could alleviate organ injury in HS. This study offers deeper insights into the pathogenesis of HS, supporting the development of optimal treatment strategies.

M. S. Park and B. W. Kim.

Consistently higher and steeper apparent temperature-heat-related illness risk among occupational cases in Korea: evidence from national emergency department surveillance.

FRONTIERS IN PUBLIC HEALTH. 2026;14.

<https://doi.org/10.3389/fpubh.2026.1786564>

Background Heat-related illness (HRI) is increasing under climate change, particularly in humid regions. While heat alerts increasingly rely on apparent temperature (AT), evidence linking AT conditions to differential HRI risk by occupational status remains limited. Methods We linked national emergency department (ED)-based HRI surveillance with daily national mean AT for June-September 2015-2024. We summarized bin-wise mean daily counts and estimated bin-specific incidence rate ratios (IRRs; reference = 24 degrees C) using Poisson regression. Results HRI increased non-linearly with AT in both groups, and occupational IRRs tended to be higher than non-occupational IRRs at warmer bins. At 31 degrees C, occupational IRR was 37.07 vs. 23.86 for non-occupational; at 33 degrees C, 104.75 vs. 72.25; and at 34 degrees C, 167.22 vs. 141.06. Conclusion Workers may experience higher HRI risk under rising AT, underscoring the need for worker-centered prevention and heat-risk communication in humid climates.

Y. Y. Zhao, Q. C. Xu, X. S. Wu, Y. Song, X. P. Yang and W. W. Liu.

Effects of whole-body frontal thermal radiation on thermal responses and cognitive performance in seated posture at an initial high-temperature.

BUILDING SIMULATION. 2026.

<https://doi.org/10.1007/s12273-026-1422-3>

32 degrees C is defined as the initial high-temperature condition. While the adverse effects of this temperature alone on the human body are relatively limited, the addition of thermal radiation may lead to significant negative impacts. However, there is a notable lack of relevant research specifically addressing this temperature condition. This study conducted climate chamber simulation experiments with three designed conditions: 26 degrees C, 32 degrees C, and 32 degrees C with an additional 2 kW/m² thermal radiation source. During the experiments, subjects remained seated 1.5 meters from the radiation source, resulting in a measured irradiance of 195 W/m² on the frontal body surface. Over a 135-minute exposure period, physiological parameters and subjective sensations were evaluated for 36 subjects, and cognitive performance was assessed using ten different tests. Compared to the 26 degrees C condition, exposure to 32 degrees C alone had a limited impact on physiological parameters, subjective sensation, and cognitive performance. However, with an added 2 kW/m² thermal radiation source at 32 degrees C, the core temperature, skin temperature, heart rate, the low-frequency to high-frequency ratio (LF/HF), and weight loss increased significantly. Thermal discomfort and thermal unacceptability also rose markedly, and acute symptoms related to neurobehavioral function intensified. Notably, performance declined significantly in a greater number of cognitive tests, including the stroop test, Tsai-Partington (TP) test, 1-back test, and both high/low load tests. These results indicated that the addition of thermal radiation at 32 degrees C elevated occupational safety risks. This study provides a theoretical basis for establishing new safety standards for work conducted under combined high-temperature and thermal radiation conditions.

E. Loud, S. Ismail, B. Evans, C. Petrokofsky, M. Davies, D. Blake, S. Kovats and P. Coleman.

Rapid review: health and maximum indoor temperature thresholds in high income countries.

ENVIRONMENTAL RESEARCH COMMUNICATIONS. 2026;8(3).

<https://doi.org/10.1088/2515-7620/ae4dbd>

There are currently no formal guidelines on maximum indoor temperature thresholds in household, community or workplace settings in the UK, despite the built environment being a major determinant of heat-related mortality and morbidity. This rapid review considered at what temperature threshold(s) hot indoor environments begin to harm human health in high income countries, with a view to informing potential future recommendations and UK policy on this topic. We looked for articles measuring human health and high indoor temperatures in high income countries. Searches of Medline, Embase, Web of Science and Scopus identified 5,642 articles published between 2017-2024, of which 12 articles were included. Countries, populations, settings, and methods of exposure measurement differed within the final set of studies. Health outcomes were varied and included measures such as risk or odds of death, indicators of morbidity, ambulance calls, and self-reported heat related illness, among others. Thresholds at which adverse health outcomes were observed spanned a wide range of temperatures, from 17 degrees C to 31 degrees C. While there was a correlation between high indoor temperatures and health outcomes, the body of evidence was not coherent or consistent. There remains a dearth of evidence on safe maximum temperatures in indoor settings. Future research should study directly measured or well-modelled indoor temperature with acute health outcomes for groups at highest risk of heat related morbidity and mortality, to inform adaptation policy in the context of a rapidly warming climate. Until there is extensive scientific data to support a maximum indoor temperature threshold, 26 degrees C may be the most suitable threshold for a maximum indoor temperature threshold for at-risk groups in keeping with the existing guidance.

Outils et capteurs de mesure

A. Hajji, C. Hernandez-Alvarez, I. R. Martín and A. Megriche.

Advanced optical thermometry for in vitro applications: Leveraging Nd³⁺;Er³⁺ co-doped TiO₂ nanorods for high-sensitivity, non-invasive temperature sensing.

CERAMICS INTERNATIONAL. 2026;52(9):12518-28.

<https://doi.org/10.1016/j.ceramint.2026.01.397>

Luminescence thermometry, which leverages fluorescence-emitting nanomaterials, is crucial for a wide range of applications. The approach detailed in this study marks a significant synthesis of a high-performance radiometric nanothermometer. TiO₂ nanorods were synthesized at first via a sonication process combined with hydrothermal treatment. For optical temperature sensing, particularly within the first biological optical window, TiO₂ nanorods were co-doped with Er³⁺ and Nd³⁺ ions. The incorporation of rare earth ions into the host matrix was confirmed by XRD, while SEM showed a well-defined nanorod morphology further confirmed by TEM. The optical characterization under 532 nm laser excitation revealed distinct emission peaks corresponding to Er³⁺ and Nd³⁺ transitions in the 600-1100 nm spectral range, with a strong intensity variation as the temperature increased from 298 K to 398 K. The fluorescence intensity ratio (FIR) of the emission peaks at 810 nm and 900 nm was used to develop a radiometric temperature sensor, showing a maximum relative sensitivity of 2.81 % K⁻¹ at room temperature with a temperature resolution of 0.39 K. Additionally, the luminescent material's performance was evaluated with an intralipid 5 % solution as an optical tissue phantom, demonstrating its potential for in vitro applications. These findings highlight the potential of TiO₂:Er³⁺;Nd(3+)nanorods as a promising material for non-invasive, high-sensitivity optical temperature sensing in biological and medical contexts.

Travail par fortes chaleurs et périodes de canicule

J. C. Flunker, C. Reeb-Whitaker, É. Chavez-Santos, M. Blancas, S. Florez-Acevedo, K. Garbuz, T. Schoonover and J. T. Spector.

Comparison of Shade Materials for Agricultural Worker Heat Exposure Mitigation.

JOURNAL OF AGROMEDICINE. 2026.

<https://doi.org/10.1080/1059924X.2026.2639063>

Agricultural workers are at high risk of morbidity and mortality from workplace heat stress. Shade contributes to reduced heat exposure by blocking solar radiation. Though several US states have adopted occupational heat rules that require shade, implementation of specific shade approaches is typically not specified in rules. We compared different shade materials for agricultural worker heat exposure mitigation to inform decision-making. Methods We conducted a quantitative field comparison study over three summer days in a real-world agricultural setting in Central Washington State. We examined the effect of five different shade materials on solar radiation and heat exposure, measured using Black Globe (BG) and Wet Bulb Globe Temperature (WBGT) sensors, respectively. We used multivariable linear mixed-effects regression to examine the effect of different materials on BG and WBGT while accounting for repeated measures and small cluster sizes. We also performed a qualitative assessment of shade preferences among agricultural partners, including workers and supervisors. Results The mean (SD) dry air temperature across all study days was 28.3(1.3)degrees C [82.9(2.4)]degrees F. Shade materials reduced BG by 6.1-8.8 degrees C and WBGT by 1.7-2.2 degrees C, on average, depending on the material, compared to no shade. Compared to no shade, the largest reduction in BG (-8.81 degrees C) was seen for a hay tarp material (HAY: 95% Confidence Interval [CI]: -9.39, -8.23) followed by an 80% monofilament material (M80: -7.68 degrees C; 95%CI -8.27,-7.10). For WBGT, we also found the largest reductions among HAY (-2.22 degrees C; 95%CI -2.44,-2.00) and M80 (-2.07 degrees C; 95%CI -2.29,-1.84). Comparing between shade materials, we did not find substantial differences in BG and WBGT. Ease of use and mobility of shade structures near work locations, in addition to effectiveness in reducing heat exposure, was identified in qualitative analyses as factors that may influence workplace shade implementation decisions. Conclusions In this study, we found that all studied shade materials significantly reduced BG and WBGT compared to no shade, but we observed no substantial differences in heat exposure mitigation between the shade materials themselves. For similarly performing shade materials, worker and supervisor preferences and practical considerations should be considered when selecting shade approaches in specific workplaces that are likely to be adopted and sustained.

S. C. C. Lung, S. C. Hu, C. Y. Tsai, M. C. M. Tsou, J. C. J. Yeh and C. H. Liu.

An innovative method of evaluating the association of heat exposure and heart rate variability in a panel of agricultural workers with small and lightweight personal sensors.

JOURNAL OF EXPOSURE SCIENCE AND ENVIRONMENTAL EPIDEMIOLOGY. 2026.

<https://doi.org/10.1038/s41370-026-00848-9>

Agricultural workers are a highly exposed yet understudied group in the context of climate change. Objective This study filled the research gaps in assessing personal heat exposure, its association with immediate changes in heart rate variability (HRV), and intervention choices for agricultural workers. Methods Twenty-five participants were recruited from a pear orchard community, a rice seedling field, and a vegetable greenhouse farm in 2020 summer. Seven-day exposure of wet-bulb

globe temperature (WBGT) was assessed for each participant with personal sensors for temperature, relative humidity, and solar radiation, as well as fixed-location monitoring for wind speed. These data were used as inputs for thermodynamic-principle-based Liljegren equations to calculate WBGT. Additionally, participants wore small medically certified HRV biosensors for 96 h. Results WBGT levels were 27.0 +/- 1.7, 31.9 +/- 3.7, and 32.6 +/- 6.3 degrees C for the participants at work in the pear orchards, rice fields, and greenhouse farm, respectively. The highest percentages above 32.2 degrees C of the rice-field and greenhouse participants were 60.8% and 66.3%, respectively. Peak WBGT reached 48.2 degrees C. The ambient WBGT from a fixed-location monitor underestimated the mean exposure, maximum exposure, and percentages above the critical thresholds of 32.2 degrees C and 36 degrees C for outdoor unshaded participants. The evident interpersonal variations emphasized the importance/necessity of individual WBGT assessments. A 1 degrees C WBGT increase was statistically significantly associated with a 1.05-2.44% decrease in all HRV indicators, except low-frequency/high-frequency, and a 0.65% increase in HR. Wearing gloves, masks, and long garments may aggravate HRV responses, whereas short garments may be protective. Significance This is the first study applying personal environmental and biological sensors assessing WBGT and WBGT-HRV relationships of outdoor workers. The findings highlight the need for heat-health adaptation strategies, including personalized protective measures and WBGT-based warnings. The innovative methodology can be widely used for other outdoor workers. Impact This study addresses critical knowledge gaps in occupational heat exposure research by employing innovative exposure and epidemiological methodologies to assess personal WBGT exposure and its association with HRV in agricultural workers. The findings highlight substantial discrepancies between ambient and personal WBGT levels. By integrating advanced sensors and the OSHA-approved Liljegren equations to obtain WBGT, this study establishes a scalable framework for researchers and policymakers worldwide to accurately assess heat exposure, exposure-health relationships, and intervention strategies. These insights are particularly valuable for protecting agricultural workers as climate change intensifies occupational heat stress, thus fostering resilience in vulnerable populations and promoting overall health.

M. Buqammaz, J. Almatrouk, M. L. Kile and L. Kincl.

Policies and Interventions in Middle Eastern and North African Countries to Mitigate Heat Stress Experienced by Outdoor Workers: A Scoping Literature Review.

CURRENT ENVIRONMENTAL HEALTH REPORTS. 2026;13(1).

<https://doi.org/10.1007/s40572-026-00525-x>

Despite the significant public health challenges posed by heat stress and rising temperatures for outdoor workers in the Middle East and North Africa (MENA) region, there has been insufficient focus on enforcing adequate policies, identifying effective heat stress prevention interventions, and providing evidence-based recommendations. Methods This scoping review synthesizes literature on policies and interventions that protect outdoor workers from heat stress in the MENA region. Studies from 1996 to 2024 were identified in PubMed, EBSCOhost, Web of Science, and Google Scholar. Results Thirty-nine articles and governmental documents met our criteria and were included in this review. Studies have been conducted in only 9 of the 18 MENA countries. Among the 39 included studies, 19 described formal policies, while all had descriptions of tested interventions or informal practices, and 9 tested the effectiveness of interventions and provided evidence-based recommendations. The most commonly practiced protective intervention was hydration. Conclusion Occupational heat stress policies in the MENA region predominantly rely on administrative controls, such as limiting work hours. However, a more comprehensive approach is emerging in some countries, incorporating measures such as heat exposure monitoring, mandatory worker training, provision of shaded or cooled rest areas, structured acclimatization protocols, and environmental alert systems. These layered interventions offer a more effective framework for protecting outdoor workers, particularly in high-risk sectors such as

construction and agriculture. The literature highlights significant gaps, underscoring the need for further research to assess the effectiveness of current policies and to explore innovative interventions for combating heat stress as temperatures in the MENA region become increasingly extreme.

P. Mishra and L. Parsons.

Rest in a Warming Workplace: Resituating the Science and Policy of Non-Work Under Climate Change.

GEO-GEOGRAPHY AND ENVIRONMENT. 2026;13(1).

<https://doi.org/10.1002/geo2.70070>

Rest is increasingly presented as a key solution to the challenge of rising workplace temperatures under climate change. Yet, despite this growing importance, the scientific literature often treats the relationship between rest and core temperature simplistically, viewing rest as a passive recovery tool essential for cooling the body and maintaining productivity. We frame this dominant approach as the 'recovery-productivity calculus' that underpins current debates on rest-based heat interventions, such as the Threshold Limit Values that allocate rest schedules in response to heat risk. This paper presents a critical review of rest under heat stress, arguing that the recovery-productivity calculus overlooks the dynamic, subjective and political nature of rest in the context of heat stress. This oversight (or lacuna) stems from the history of modern heat stress research, where the dominance of military-based research and laboratory studies replaced field-based studies with workers, influencing insights on occupational heat stress. Furthermore, heat research bears parallels to the historical study of industrial fatigue, highlighting how productivity concerns may become dominant. Drawing from critical heat studies and the anthropology of work, we incorporate an analysis of power and subjectivity into the study of rest, considering two forms: planned breaks and self-pacing. Our focus is to develop the question of rest not as secondary or residual within the heat-work relation-as productivity-recovery centred framings construe-but as a nuanced practice that actively informs the success of heat governance. As rest becomes an ever more important tool in the climate-changed workplace, this paper provides a basis to understand the practices that underpin its heat mitigation capacity and seeks to inform the effective uptake of rest-based interventions.

Actualités mars 2026

- Travail par fortes chaleurs et périodes de canicule

[Three security operatives slump during Soludo's second term inauguration.](#) Punchng.com, 17 mars 2026

- Outils et capteurs de mesure

[Le CIUSSS installe des capteurs de chaleur à des postes de travail au CLSC de Chicoutimi.](#) Ici.radio-canada.ca, 24 mars 2026

- EPI, matériaux protecteurs/refroidissants

[« Trop épaisses, trop lourdes, trop chaudes » : les nouvelles tenues de protection des pompiers sous le feu des critiques.](#) Ouest-france, 12 mars 2026

[Brûlé au 2e et au 3e degré, le salarié prêté à la fonderie a « failli y passer ».](#) Ouest-france.fr, 19 mars 2026