HSE science and research publications 2024

- Journal papers
- Conference publications
- Reports by HSE scientists and expert committees
- National and official statistics publications

Journal papers

Bacon J, Butler O, Cairns J, Cavoura O, Cook J, Davidson C and Mertz-Kraus R, (2024) Atomic Spectrometry Update - a review of advances in environmental analysis. *Journal of Analytical Atomic Spectrometry*, 39, 11-65.

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Brookman B, Belavari C, Butler O, Corbi R, Horsky M, Jordan H, Laurent C, Patriarca M, Tiikkainen U, van Putten K, Robouch P, Sarkany E and Sorbo A, (2024) Proficiency testing in analytical chemistry, microbiology and laboratory medicine: Discussions on current practice and future directions. *Accreditation and Quality Assurance*, 29, 381-389

Burden N et al including Brescia S, (2024) Resource and animal use implications of the proposed REACH information requirements for endocrine disruptor assessment. *Regulatory Toxicology and Pharmacology*, 151, 105671.

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Coleman A, Gartland N, Fishwick D, Johnson S and van Tongeren M, (2024) Public transport in the UK: Considerations for continued rehabilitation and future planning for a sector impacted by COVID-19. *Transportation Research Interdisciplinary Perspectives,* 24. 101044

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Gant S, Stavrakakis P, Slater D, Mounaim-Rouselle C and Valera-Media A, (2024) Health and Safety Workshop Report: Version 2, 2023. Jounral of Ammonia Energy, 2(1)

Gilham E, Raja A, van Veldhoven K, Nicholls G, Sandys V, Atkinson B, Spencer A, Nicholls I, Cooke J, Bennett A, Morgan D, Keen C, Fletcher T, Pearce N, Manley P, Brickley E and Chen Y, (2024) A SARS-CoV-2 outbreak in a public order and safety training facility in England, June 2021. *Annals of Work Exposures and Health*, 68, 770-776.

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Hopf N and et al including Jones K, (2024) A harmonized occupational biomonitoring approach. *Environment International*, 191, 108990.

Iskandar I, Gawkrodger D J, Byrne L, Gittins M, Carder M, Fishwick D and van Tongeren M, (2024) Trends in work-related respiratory diseases attributed to nickel, chromium and cobalt in the UK: Descriptive findings from The Health and Occupation Research (THOR) network 1996-2019. *Occupational & Environmental Medicine*, 81, 220-224.

Keen C, Sandys V and Crook B, (2024) Exposure to dust and bioaerosols at GB municipal waste handling sites. *The New Zealand Journal of Health and Safety Practice* 1(3), 1-15.

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Silva A, Loizou G, McNally K, Osborne O, Potter C, Gott D, Colbourne J and Viant M, (2024) A novel method to derive a human safety limit for PFOA by gene expression profiling and modelling. *Frontiers in Toxicology*, 6,

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Conference publications

Chambers C and Hall N, (2024) Regulations and standards for Robotics and Autonomous Systems in the UK machinery sector. *Safety of Industrial Automated Systems -SIAS 2024*, June 12-13, 2024, Tampere, Finland, Paper 42

Chambers C, McCulloch P and Li Y, (2024) Visualising risk reduction: Utilising weighted bowtie diagrams for enhanced risk assessment, management and communication. *Hazards 34*, 5-7 November 2024, Lancashire Cricket Club, UK, Paper 40

Dunford S, Bunn J and Marshall M, (2024) Storm preparedness for Mobile Offshore Drilling Units (MODUs):
Case studies of decision making under uncertainty. *Hazards 34*, 5-7 November 2024, Lancashire Cricket Club, UK, Paper 147

Goff R, Newton A, Wray G, Rattigan W, Vizma J and Lyons K, (2024) Failure of the vacuum in a vacuum insulated hose while flowing liquid hydrogen. *Hazards 34*, 5-7 November, Lancashire Cricket Club, UK, Paper 111

Newton A, (2024) The Rarefaction Balancing Method in HSE's PiRRaM Model. *Hazards 34*, 5-7 November 2024, Lancashire Cricket Club, UK, Paper 154

Newton A, (2024) An analytical solution to the Transient One-Dimensional Compressible Pipe-Flow Equations. *Hazards 34,* 5-7 November 2024, Lancashire Cricket Club, UK, Paper 155

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Reports by HSE scientists and expert committees

HSE Annual Science Review 2024

Bannister A, Stones C, Birkitt K and Atkin L, (2024) When welding goes wrong: Learning from past failures. (RR1215) HSE.

Bettis R, (2024) Area Classification for Oil Mists (MISTS2): Summary Report (RR1207) HSE.

Chambers C and Lockhart A, (2024) Review of key machinery safety standards and guidance, and how they reflect on emerging technologies. (RR1214) HSE.

Coldwell M, (2024) Respirable crystalline silica exposure during demolition activity. (RR1202) HSE

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Department for Environment, Food and Rural Affairs and Health and Safety Executive, (2024) UK Expert Committee on Pesticides (ECP): Annual report. Annual summary of the work carried out by the UK Expert Committee on Pesticides (ECP).

Giles A, (2024) Investigation of Mist Explosion Hazards (MISTS2) - Diesel and Biodiesel Fuel Testing. (RR1208) HSE.

Giles A, (2024) Investigation of Mist Explosion Hazards (MISTS2) - Nozzle Shape Effects Using SLM. (RR1209) HSE.

Giles A, (2024) Area Classification for Oil Mists (MISTS2) - Vertical ignition test report. (RR1210) HSE.

Jagger S, (2024) Fire safety: hydraulic systems used in underground work. (RR1206) HSE.

McConnachie G, Kenny L, Mason H, Johnson P, Nwoko K and Kerr R, (2024) Ensuring improved isocyanate exposure assessment to better protect health. (RR1199) HSE

Okunribido O, (2024) Reviewing and updating the evidence base on the hazards and risks for usculoskeletal disorder symptoms and visual problems regulated by the Display Screen Equipment Regulations. (RR1205) HSE.

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Yates T and McNally K, (2024) Uncertainty and sensitivity analysis of the HardSPEC environmental exposure model for pesticide regulatory assessments. (RR1204) HSE.

National and official statistics publications

Health and Safety Executive, (2024) Exposure to lead in Great Britain 2022 to 2023.

Health and Safety Executive, (2024) Fatal injuries arising from accidents at work in Great Britain: Summary for April to December 2023.

Health and Safety Executive, (2024) Fatal injuries arising from accidents at work in Great Britain: Summary for April to June 2024

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Health and Safety Executive, (2024) Mesothelioma and asbestosis mortality in Great Britain: 1968 to 2022.

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Health and Safety Executive, (2024) Pesticide usage survey report: outdoor vegetable crops in the United Kingdom 2023

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