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SASOM
South African Society
of Occupational Medicine
FOUNDED IN 1948

South African Society of
Occupational Medicine (SASOM)



SAIOH

Southern African Institute for
Occupational Hygiene (SAIOH)



Mine Medical Professionals
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Front cover

Dion Ndlovu is a young Bulawayo-based artist specialising in painting, illustration, and digital sculpture

Instagram:

@whoisdion_

e-mail:

dionndlovu35@gmail.com

Website:

https://www.behance.net/dionndlovu

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SOUTHERN AFRICA

Volume 31, Issue 4, 2025



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1973-2025

South African Society of Occupational Medicine (SASOM)

Claudia Frost

Tel: +27 (0)87 288 0893

e-mail: office@sasom.org

website: www.sasom.org



SAIOH

Southern African Institute for Occupational Hygiene (SAIOH)

Kate Smart

Tel: +27 (0)63 781 0686

e-mail: info@saioh.co.za

website: www.saioh.co.za



Mine Medical Professionals Association (MMPA)

Noluthando Sebe

Tel: +27 (0)11 568 2054

e-mail: noluthandos@mpas.org.za

website: www.mmpa.org.za

EDITOR-IN-CHIEF

Gill Nelson, PhD (Occupational Health): University of the Witwatersrand, South Africa

Affiliations: University of the Witwatersrand, South Africa; MMPA life member

e-mail: gill.nelson@wits.ac.za

ASSISTANT EDITOR

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Affiliation: University of the Witwatersrand

e-mail: zodwa.ndlovu@wits.ac.za

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Affiliation: MettaMedia (Pty) Ltd

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Medicine, UK; International Commission for Occupational Health; World Health Organization; SASOM honorary life member; MMPA honorary

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PUBLISHER

MettaMedia (Pty) Ltd

Kevin Beaumont, Cell: +27 (0)82 774 2210

PO Box 210, Tulbagh, 6820

e-mail: kevin@mettamedia.co.za

ADVERTISING

Barbara Spence, Cell: +27 (0)82 881 3454

e-mail: barbara@avenue.co.za

SUBSCRIPTIONS

Kevin Beaumont, Cell: +27 (0)82 774 2210

e-mail: kevin@mettamedia.co.za

PRODUCTION

Perry Digital Media

Michelle Perry, Cell: +27 (0)83 528 7491

e-mail: michelle.perry@perrydigitalmedia.co.za

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Use your personal login details to access past issues. Should you have any queries, e-mail kevin@mettamedia.co.za.

Health and Safety Posters and Toolkit for Teams

The Minerals Council South Africa is pleased to share new Health and Safety materials. The posters and messaging toolkit offer clear reminders that reflect daily work realities. Covering PPE, fatigue, mental health, stress, HIV/AIDS, substance use, GBV, leadership, and teamwork, the resources support a culture of care and reinforce the small steps that help bring employees home safely.

[Click here to download the full set of materials](#)

Speaking Up Keeps Us Safe.

**When you raise your hand,
you protect everyone underground.**

EVERY SAFE AND HEALTHY STEP BRINGS YOU HOME.

SPEAK UP ABOUT DANGER

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SOUTHERN AFRICA

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Publish or perish – beware the ethical hazards



Ntombizodwa Ndlovu,
Assistant Editor

This, our last issue for 2025, contains a bumper harvest of original research and opinion papers, reports, and other news. We are proud to profile Dr Dipalesa Mokoboto, who has been promoted to the position of Chief Director in Occupational Health in the Department of Mineral and Petroleum Resources. We wish her every success in her new role.

On 9 December, I presented a webinar on behalf of the OSHAfrica Scientific Committee on Data, Research and Publication, titled *Publish or Perish*.

Researchers are familiar with the term, which is defined as “*the pressure put on academics to publish in scholarly journals rapidly and continually as a condition for employment (finding a job), promotion, and even maintaining one’s job*”. This continuous and unrelenting race to publish is lifelong, and is the way in which researchers become and remain visible and relevant within the research fraternity. Without visibility, research careers stagnate and die.

In addition to visibility and career progression, the pressure to publish has many benefits. It motivates researchers to increase productivity and promotes healthy competition among peers. The research productivity of individuals contributes to the prestige, rankings, and income of institutions, and the knowledge generated leads to the betterment of society.

Pressure to publish or perish may generate a culture of ‘publish at all costs’, which emphasises quantity at the expense of quality. To publish rapidly, researchers may resort to unethical practices, which include:

- fabrication: outright invention of results
- falsification: manipulation of results to make them more acceptable
- salami slicing: inappropriate division of one substantial study into several smaller publications that do not add meaningful new knowledge
- duplication: publication of the same or similar results in more than one journal, without proper disclosure or justification
- plagiarism: presenting another person’s ideas, words, or work as one’s own, without appropriate acknowledgement or citation
- guest authorship: inclusion of individuals as authors, even though they made little or no meaningful contribution to the research and publication
- ghost authorship: exclusion of individuals who contributed significantly to the research and publication¹

We must be vigilant and ensure that we do not engage in these unethical practices.

Incomplete reporting in publications is an issue that editors encounter often and which should be addressed by authors. All published research should be potentially reproducible. One study found that more than half of the researchers who participated could not reproduce their own experiments.² Poor reproducibility can be avoided by use of correct study designs and methodologies, adequate sample sizes, appropriate analytical methods, and describing methods in sufficient detail in

manuscripts. Consultations with skilled researchers and statisticians should be done at the proposal stage, to ensure that suitable data collection methods are used, sample sizes are sufficient, and all necessary variables are collected. Similarly, at the analysis stage, experts should be consulted to ensure that appropriate statistical or qualitative methods are used and that findings are interpreted correctly. [Several guidelines are available to ensure complete reporting](#). These include the STROBE for reporting of observational studies, CARE for case reports, and PRISMA for systematic reviews. I strongly recommend that authors follow these guidelines.

An example of the surge in numbers of journal publications is the increase in the number of biomedical records indexed in PubMed – from approximately 15 million in 2004 (Vardakas et al., 2015)³ to 39 million in 2025 (<https://pubmed.ncbi.nlm.nih.gov/about/>). The demand for publication has led to a proliferation of new journals, including open access publishing that makes journal papers freely accessible. However, predatory journals, which exploit the open-access model of charging author publication fees, but without legitimate peer review, editorial standards, or quality control, are also common.⁴ While the idea of rapid publication is attractive, researchers must avoid publishing in these journals as this may have negative consequences on their careers.

The large number of uncited published papers is of concern, and raises questions around the need to publish for career progression at the expense of scholarship. Citation indices are used to estimate the impact and influence of research, by providing a measure of the number of times scholarly publications are cited by other authors. Unethical practices by researchers to increase citations, such as excessive self-citation, citation cartels, or coercive citation, should be avoided. There are numerous ethical ways to increase citations. For example, publishing high-quality research that addresses important and relevant questions; careful selection of appropriate journals with good visibility and readership; writing clear, informative titles and abstracts; use of widely searched keywords; sharing publications through academic networks; and presenting work at conferences and seminars to increase exposure. This issue of *Occupational Health Southern Africa* contains abstracts from the 8th Mombasa Annual International OSH Conference covering numerous topical issues. I challenge the authors to convert these abstracts into high-quality papers in recognised journals, if they have not already done so.

We thank everyone who has contributed to the journal – authors, reviewers, readers, Editorial Board, and publishing team members. We wish you all a joyous festive season and productive new year.

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CHP filters use a high-quality electrostatic filtration medium with filtration efficiency exceeding 99%, capable of trapping bacteria, viruses and other micro-organisms.

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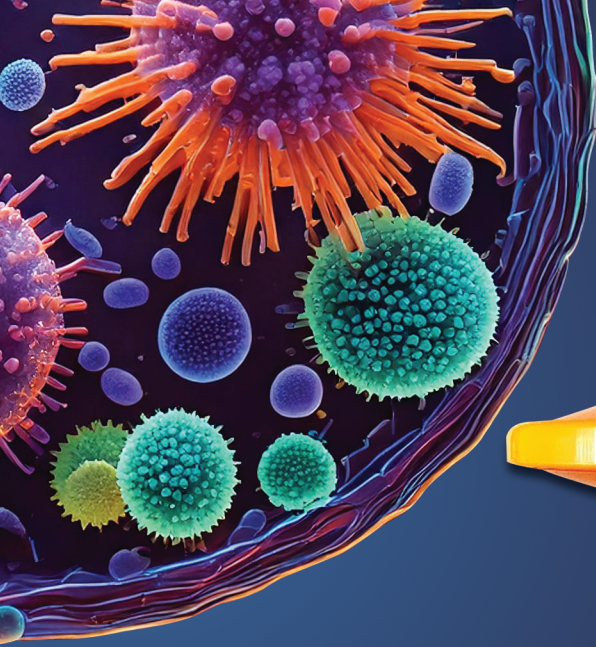
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Product Code	Spirometer	Model
PFT-2025 (Standard) PFT-2225 (Oval)	ndd Medical Technologies	EasyOne Air Easy on-PC EasyOne Pro EasyOne Pro LAB
	Schiller	SpiroScout SPIROVIT SP-1 G2

Product Code	Spirometer	Model
PFT-2033 (Small) PFT-2533 (Standard) PFT-2233 (Oval)	Schiller	SP260 Flowscreen Pro
	Jaeger	MasterScope MasterScreen
		Flowmate Spiro Pro
	Vyaire	Vyntus SPIRO PC Vyntus ONE
		AME
	IQ TeQ	Short Adaptor
	ORCAwave	Short Adaptor
	MSG	Short Adaptor
	Thor/Spirosonic	All models

Product Code	Spirometer	Model	
PFT-2030 (Small) PFT-2530 (Standard) PFT-2230 (Oval)	MIR	All models	
	Vitalograph	ALPHA Touch ALPHA 6000 In2itive	
		Micro Medical	All models
		Schiller	SP-260
	MH	LA303	
	COSMED	microQuark Quark Spiro	
		Pony FX	
	CONTEC	All models	

Product Code	Spirometer	Model
PFT-2044 (Small) PFT-2544 (Standard) PFT-2244 (Oval)	nSpire	Digidoser
		KoKo
		HDcpet 6000
		Sx 1000 NHD4500

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options*



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SASOM 2025 Conference tackles AI, informal work, and the future of occupational medicine in Africa

Multi-disciplinary summit explores technology's role in advancing medical care for vulnerable workers and strengthening occupational medicine practice

The South African Society of Occupational Medicine (SASOM) successfully convened its 2025 Annual Conference on 15 November 2025 at the Protea Fire & Ice! Menlyn, bringing together occupational medicine practitioners (OMPs) alongside nurses, ergonomists, human resources professionals, and technology innovators to address one of the most pressing challenges facing occupational medicine practice in Africa: the intersection of artificial intelligence (AI), informal work, and worker health protection.

Under the theme *Artificial Intelligence at the Crossroads of Informal Work and Public Health: Risks, Innovations, and Responsibilities*, the conference examined how technology, innovation, and multi-disciplinary collaboration can strengthen occupational medicine's capacity to protect and advance the health of workers in the informal sector – a population representing approximately 60% of the global workforce and over 80% of Africa's labour force.

MULTI-DISCIPLINARY COLLABORATION STRENGTHENS OCCUPATIONAL MEDICINE

The conference showcased how allied disciplines strengthen occupational medicine practice, featuring expertise from cybersecurity, ergonomics, nursing, AI development, and international public health policy working alongside OMPs.

"The challenges facing occupational medicine today cannot be solved by medicine working in isolation", said Prof. Daan Kocks, Chair of SASOM. "This year's conference demonstrated the power of bringing together diverse perspectives – from cybersecurity experts and AI developers to nurses on the frontlines and ergonomics specialists working in communities. Each discipline brings unique insights that, when integrated with occupational medicine practice, create comprehensive solutions for protecting worker health and wellbeing, particularly for those in vulnerable and informal employment."

Seven distinguished presenters delivered evidence-based insights spanning cybersecurity threats to healthcare systems (Prof. Joey Jansen van Vuuren, Tshwane University of Technology); the ethical integration of AI in occupational medicine across Africa (Dr Casper Joubert, Stellenbosch University); human factors engineering in informal economies (Ms Sma Ngcamu-Tukulula, President of the Ergonomics Society of South Africa (ESSA), and Mr Andrew Todd, Rhodes University); community-based nursing interventions (Sr Mercia Patience, South African Society of Occupational Health Nursing Practitioners (SASOHN)); AI-powered tuberculosis (TB) screening technology (Mr Johan Coetzee, AI Diagnostics); and global perspectives on migrant and informal worker health (Dr Acran Salmen-Navarro, New York University, USA and President of the Global Coalition on Informal Workers' Health, Safety and Wellbeing (GCIW)).



15

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INFORMAL WORK AND
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GCIW
Global Coalition on
Informal Workers

RMA
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Image: courtesy of SASOM

CENTERING INFORMAL AND MIGRANT WORKERS IN OCCUPATIONAL MEDICINE

A defining focus of the 2025 conference was the urgent need to extend healthcare and occupational medicine protections to informal and migrant workers – populations historically excluded from medical workplace safety systems, despite facing disproportionate health risks.

Ms Sma Ngcamu-Tukulula emphasised the necessity of recalibrating human factors and ergonomics practice to serve Africa's informal economy. *"We must transition from compliance-focused approaches to co-creation with informal workers, from risk avoidance to resilience building, and from human-machine fit to human-system synergy", she stated. "Embedding 'Ubuntu' principles – our African values of collective wellbeing, dignity, and compassion – reinforces the ethical foundation of ergonomics and ensures our solutions truly serve the communities who need them most."*

Dr Acran Salmen-Navarro, joining virtually from New York, provided international context on the precarious conditions facing informal and migrant workers, globally. *"Informal and migrant workers have historically faced what we call '4-D jobs' – dirty, dangerous, difficult, and discriminatory", noted Dr Salmen-Navarro. "As technology reshapes the global workforce, we have both an opportunity and a responsibility to ensure AI and innovation enhance worker dignity and wellbeing rather than deepening existing inequalities. The collaboration between SASOM, GCIW, and African institutions represents exactly the kind of partnership needed to drive meaningful change."*

The conference also previewed the First International Conference on Informal Work: Health, Safety and Wellbeing, scheduled for November 2026 in Santiago de Cali, Colombia – positioning South African OMPs as leaders in this global movement.

AI AS TOOL FOR OCCUPATIONAL MEDICINE PRACTICE

Several presentations explored how AI and digital health technologies can address longstanding gaps in occupational medicine surveillance, diagnosis, and clinical intervention – particularly in resource-constrained settings.

Mr Johan Coetzee presented AI Diagnostics' AI-powered TB screening platform, approved by the South African Health Products Regulatory Authority (SAHPRA), which enables frontline health workers to conduct accurate TB screening using a smart stethoscope and mobile application. This innovation exemplifies how technology can expand access to specialist-level diagnostic capability in communities without requiring costly infrastructure or specialist personnel – strengthening OMPs' reach.

Dr Casper Joubert argued that Africa has a unique opportunity to "leapfrog" traditional development barriers by adopting AI strategically and ethically in occupational medicine practice. However, he cautioned that success requires a "human-in-the-loop" approach, robust governance, and careful attention to algorithmic bias, data privacy, and worker dignity. Prof. Joey Jansen van Vuuren highlighted the growing cybersecurity risks facing healthcare systems, emphasising that protecting health and medical data is



Participants at the 2025 SASOM Conference – L to R: Dr Jameson Malemela (Sibanye Stillwater), Prof. Daan Kocks (SASOM Chair), and Dr Geoffrey Tafaune (SASOM Treasurer) Photograph: Claudina Nogueira

itself a workplace safety and wellbeing issue – particularly given recent ransomware attacks on South Africa’s National Health Laboratory Service and other health institutions.

PROFESSIONAL DEVELOPMENT AND CONTINUING MEDICAL EDUCATION

The conference programme was accredited by the South African Medical Association (SAMA) for four Clinical and four Ethical Continuing Education Units (CEUs), automatically awarded to all Health Professions Council of South Africa- (HPCSA-) registered practitioners who attended in full. This accreditation underscores SASOM’s commitment to advancing occupational medicine practice through continuing medical education and rigorous professional development. Session chairs – Dr André Kotzé (SASOM Vice-Chair), Dr Mpho Rakgoale (National Institute for Occupational Health), and Dr Geoffrey Tafaune (SASOM Treasurer) – facilitated robust discussions that integrated clinical, ethical, policy, and practical dimensions of contemporary occupational medicine practice.

STRATEGIC PARTNERSHIPS STRENGTHEN OCCUPATIONAL MEDICINE CAPACITY

The conference was made possible through collaboration with the GCIW and ESSA, alongside sponsor support from SSEM Mthembu Medical, Rand Mutual Assurance (RMA), AI Diagnostics, Ampath Laboratories, and Dr Mahmood Jina.

Ms Claudina Nogueira, the International Commission on Occupational Health’s (ICOH’s) National Secretary for South Africa and President of Workplace Health Without Borders (WHWB), provided updates on ICOH activities and emphasised the value of international collaboration in strengthening South Africa’s occupational medicine capacity and global influence.

LOOKING FORWARD

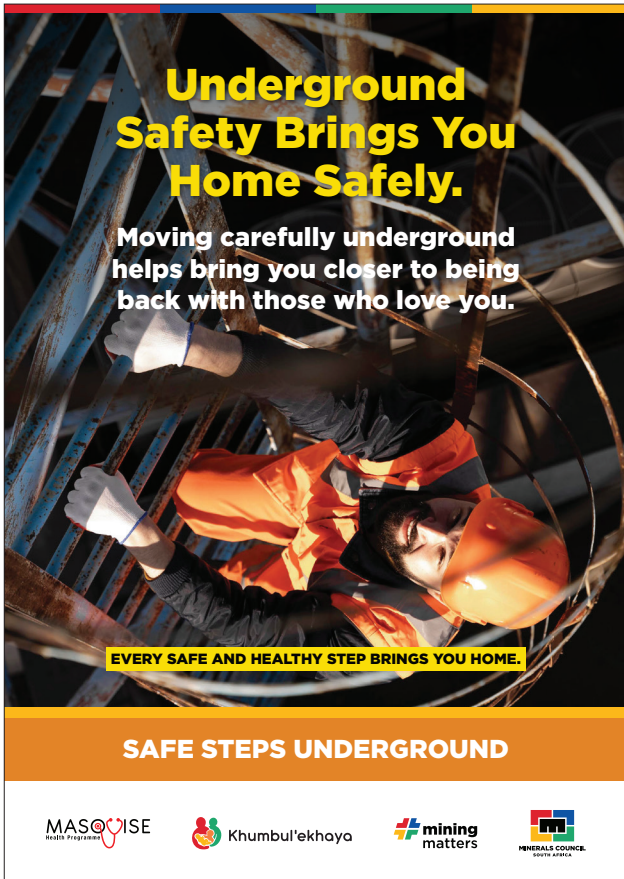
The 2025 SASOM Conference concluded with renewed commitment to advancing occupational medicine through innovation, collaboration, and inclusive practice. The Annual General Meeting (AGM) followed immediately after the conference, with delegates expressing strong support for continuing this momentum into 2026.

As Africa’s workforce continues to evolve – shaped by technological change, migration patterns, climate pressures, and economic transformation – SASOM’s role in providing thought leadership, evidence-based medical guidance, and multi-disciplinary platforms for collaboration becomes increasingly vital.

The presentations and discussions from the 2025 SASOM Conference will inform ongoing research, policy development, and occupational medicine practice innovation across South Africa and beyond, particularly in extending healthcare and medical protections to workers in informal, precarious, and non-traditional employment arrangements.

ABOUT SASOM

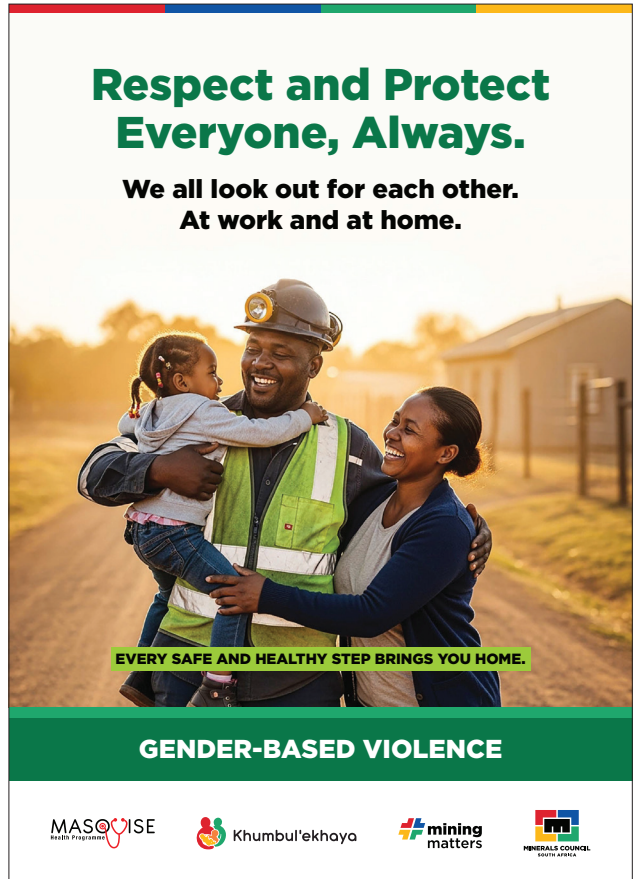
SASOM is a special interest group of SAMA with links to the World Medical Association. SASOM is affiliated with ICOH and its 37 Scientific Committees. Founded in 1948, SASOM’s mission is to promote, protect, and enhance the health of the working population of South Africa. Through guidance, education, standards, and collaboration, SASOM helps professionals navigate evolving risks, technologies, and regulatory expectations, while advancing the recognition of occupational medicine as a speciality field. For more information, visit www.sasom.org



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Message from Prof. Cas Badenhorst, SAIOH Vice President

Our President, Karen du Preez, has made the difficult decision to step down from her role, effective 1 January 2026, due to extenuating circumstances and personal reasons associated with these circumstances. While this decision comes midway through her term, it follows careful consideration and is rooted in her need to prioritise matters of personal importance at this time. We fully support her decision and recognise the commitment and integrity with which she has always approached her responsibilities, both professionally and personally.

On behalf of the SAIOH Management Board and Council, as well as the entire membership, we extend our heartfelt gratitude to Karen for her dedicated service, strategic insight, and steadfast leadership. During her tenure, she has contributed meaningfully

to strengthening our Institute, advancing the occupational hygiene profession and values, and fostering an engaged and collaborative community. We extend our best wishes to Karen during this time and remain confident that she will continue to be part of our wider professional community.

As the current Vice President of SAIOH, I will step into the role of SAIOH President on 1 January 2026, and a new SAIOH Vice President will be elected early in 2026. The SAIOH Management Board will share further information in the next few weeks regarding the interim leadership arrangements and next steps to ensure continuity of our programmes, governance, and activities.

We thank you for your understanding and continued support. 🙏

Postgraduate students in occupational health – African tertiary institutions invited to list studies on the Journal website

Occupational Health Southern Africa invites tertiary institutions in Africa to list completed occupational health studies of postgraduate students. A study is listed according to its title, abstract, and institution with a link provided to the tertiary institution's open-access repository. Listing of a study will not be considered as a publication in *Occupational Health Southern Africa* in any form, but this listing aims to inform those with an interest in occupational health in Africa of research done by postgraduate students since 2020. For submissions and other criteria, please visit <http://www.occhealth.co.za/> under the Postgrad Research menu (top right of page). 🙏



The screenshot shows the website header with the journal title 'OCCUPATIONALhealth SOUTHERN AFRICA' and navigation links: Home, About us, Past issues, For authors, For reviewers, For advertisers, Upcoming events, Postgrad research (circled in red), and Resources. Below the header, the 'Current Issue – Volume 31, Issue 3, 2025' is displayed. On the left is a thumbnail of the journal cover. On the right, there is a list of events and announcements including 'ICOH 2027', '35th International Congress on Occupational Health', 'World AIDS Day 2025', 'SAIOH Announcement', 'MINERALS COUNCIL SOUTH AFRICA', 'OccuZone Newsletter', and 'WOMEN IN THE WORK'. At the bottom of the page, there are buttons for 'Submit a paper' and 'Become a reviewer'.

Transforming adversity into opportunity for the AIDS response

Salim Abdool Karim: Director of CAPRISA; Pro Vice-Chancellor (Research), University of KwaZulu-Natal, Durban, South Africa

As South Africa commemorates World AIDS Day 2025, themed 'Overcoming disruption, transforming the AIDS response', CAPRISA Director Professor Salim Abdool Karim reflects on the frantic days following this year's unprecedented cuts to health aid and research funding from the US, arguing that the deliberate disruptiveness was designed to be cruel. Nonetheless, he argues, our HIV response must now forge ahead on a path that is more affordable, sustainable, and independent.

STOP WORK!

A "STOP WORK" order is immediate.

The Centre for the AIDS Programme of Research in South Africa (CAPRISA) received its first US Government 'STOP WORK' order from the US Agency for International Development (USAID) on 27 January 2025, imposing a 90-day suspension on a major HIV-prevention research project.

A week earlier, on 20 January 2025, incoming US President Donald Trump signed an Executive Order imposing a 90-day freeze on USAID funding. Shortly thereafter, Elon Musk and his Department of Government Efficiency arrived at the USAID headquarters to systematically dismantle it and terminate most of its projects. Within seven days, the full effect of Trump's decision was reverberating across the world. The acute US funding cuts disrupted its foreign aid programmes, which had for years worked to improve the lives of the most vulnerable communities across the globe.

The impact was instantaneous. Several US-funded projects ground to a halt. Feeding programmes for the hungry, shelter projects for those displaced by war and conflict, daycare for abandoned children, and many other programmes in dozens of countries around the world were stopped. The swiftness of the implementation of the USAID dismantling caught the world off guard.



Epidemiologist Prof. Salim Abdool Karim is internationally recognised for his significant contributions to research on HIV treatment and prevention *Photograph: Spotlight*

On 3 February, Secretary of State, Marco Rubio, declared himself to be the new Head of USAID, giving Musk carte blanche to destroy it. That day, I was contacted by journalists from *The New York Times* and from the prestigious magazine *Science* for information on the impact of US funding cuts on our HIV research.

On 7 February, *The New York Times* front page headline, "Clinical Trials Left in Lurch By Aid Freeze" informed the world of the impact of the US funding cuts on AIDS research in Africa. It described in graphic detail the impact of the funding cuts on research Dr Leila Mansoor and Dr Disebo Potloane of CAPRISA were undertaking, in partnership with world-leading US scientist Dr Sharon Hillier, in developing new HIV prevention technologies for women.

Exactly a month after the initial 90-day 'STOP WORK' order, we were notified that this US Government-funded project had been officially terminated for good. Several other large US-funded projects in South Africa, such as an HIV-vaccine development project led by Prof. Glenda Gray, also received termination notices.

While the US Government is perfectly entitled – as it sees fit – to stop funding for any of its projects, the deliberate disruptiveness of its implementation was sadly designed to be cruel.

Disownment of science

The Trump administration effectively dislocated the highly effective partnerships forged by the US and South African scientific communities over the past three decades. It was not simply a withdrawal of funding, but the disownment of science that rocked these research collaborations. A devaluing of science and an era of disinformation set in.

False information from the Trump administration is now rife, from debunked theories regarding autism from vaccines to the supposed dangers of paracetamol during pregnancy. This is a threat to the decades of progress made in the AIDS pandemic. Science, in its search for the truth, is under attack, as disinformation-based policies become official.

No time to wallow

Following the initial shock, we realised that we had zero time to wallow in this grief of sorts. CAPRISA went to work mobilising our own resources, reaching out to participants in terminated studies to offer them medical and emotional support. In March and April, our scientists routinely worked late into the night on new grant applications to research funders besides the US Government. That hard work is now beginning to bear fruit as new grants begin to fill the gaps in our research funding.

These unprecedented disruptive funding cuts have been a stark reminder to never take donor funding for granted. And certainly, never to be as heavily reliant on a single donor again. While overseas development aid is intended to be altruistic, it has often come with strings attached. Those strings were a rude awakening in 2025 and left several governments and non-governmental organisations, who were dependent on US foreign aid, in the lurch.

Scientific breakthroughs in HIV, including those by South Africa's many highly accomplished AIDS researchers, have had widespread global impact, benefitting vulnerable groups from all walks of life. Ironically, the funding cuts come at a time when even greater resources are needed for research to successfully navigate the 'last mile' on the way to the United Nations (UN) sustainable development goal of ending AIDS by 2030.

As this year's World AIDS Day theme *Overcoming disruption, transforming the AIDS response* reminds us, this is the time to forge ahead on a path that transforms the response to one that is more affordable, sustainable, and independent. As African scientists, we have already begun to take bold steps on the path to greater independence, thereby shifting our focus away from the disruption towards charting a determined path to a world without AIDS.

Republished under Creative Commons licence CC BY 4.0 (<https://creativecommons.org/licenses/by/4.0/>), *Transforming adversity into opportunity for the AIDS response*, by Prof. Salim Abdool Karim, sourced in **Spotlight** <https://www.spotlightnsp.co.za/2025/11/26/salim-abdool-karim-transforming-adversity-into-opportunity-for-the-aids-response/>.

Note: the views expressed in this article are not necessarily shared by the editors of **Occupational Health Southern Africa**, nor **Spotlight**. 

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NCMMA's annual SHE Day promotes 'zero mindset' safety culture in Northern Cape mines

On 2 October 2025, the Northern Cape Mine Managers Association (NCMMA) held its annual Safety, Health, and Environment (SHE) Day. The one-day event brings together the Northern Cape mining community, to showcase expertise and industry best practices relating to safety.

Through a series of friendly competitions, the SHE Day encourages mutual learning and collaboration amongst Association members in fields relating firefighting, first aid, environmental care, safety regulations and overall emergency preparedness.

Organised by the 2025 Association Chair, Kumba Iron Ore (Sishen Mine), the event saw representatives from 24 regional mines participate in this year's instalment, with the Principal Inspector of Mines for the Northern Cape in attendance, alongside other stakeholders from the Department of Mineral and Petroleum Resources (DMPR).

Participating teams that excelled in their respective competition categories were officially recognised during a prize-giving ceremony.

"The Northern Cape Mine Managers Association is an important collaboration platform that perpetuates unity amongst mining companies in the region", says Ntokozo Khanyile: SHEPS & Contractor Management Manager at Kumba Iron Ore.

"The NCMMA SHE Day is an impactful initiative which aligns with the Anglo American 'Zero Mindset' policy, which stipulates that everybody, everywhere should go home safe at the end of their working day. It also provides us with the opportunity to demonstrate to the general public the level of commitment mining companies have towards safety."

"Beyond that, the SHE Day is a great occasion to raise awareness around sensitive topics such as gender-based violence (GBV). Through Kumba's Women in Mining structure, we were enabled to demonstrate support towards women facing challenges within the sector, and embody our purpose of re-imagining mining to improve people's lives." [📌](#)



Kumba Iron Ore General Managers handing over awards at the NCMMA SHE DAY prize-giving ceremony, left to right: Retief Botha (Kolomela Mine General Manager), Andre Roux (Kumba Iron Ore Senior General Manager), Tebogo Mushi (Sishen Mine General Manager)

Photograph: courtesy of Melangini Pillay

Dipalesa Mokoboto

MBChB (UKZN); Master of Philosophy in Medical Law and Ethics (UP); Diploma in Occupational Health and Medicine (DOH &M) (UP); Advanced Health Management (Yale University (FPD Linked))

In December 2025, Dr Dipalesa Mokoboto was promoted to the position of Chief Director in Occupational Health in the Department of Mineral and Petroleum Resources. In this new role, she will be heading and overseeing occupational health in the Mine Health and Safety Inspectorate (MHSI), which is responsible for regulating health and safety in the mining industry. Dipalesa, fondly known as Dips, has been in the occupational health space for more than 20 years. During her clinical years, she worked as a registrar in internal medicine at George Mukhari Academic Hospital, which was a prerequisite for specialising in dermatology, and worked in the pulmonology, diabetes, renal, hypertension, and HIV clinics. She assisted with HIV research and tutored 4th and 5th year medical and dental students. There were only a few spaces available for dermatology registrarship so, while waiting for an opening, Dipalesa registered for a Postgraduate Diploma in Occupational Health and Medicine at the University of Pretoria in 2000.



Dr Dipalesa Mokoboto
 Photograph: Dr Dipalesa Mokoboto

Fortunately – or unfortunately – Dipalesa became hooked on occupational health, and continued in that space by working as a *locum tenens* for several companies that required the services of an occupational medicine practitioner (OMP). She was permanently employed as an OMP by AngloGold Ashanti in Klerksdorp, ensuring that miners were fit for their occupations. That was not an easy task, as one had to balance several factors (although many people thought otherwise). Most mineworkers are trained only in specific skills and the possibility of losing their jobs was always at the core of decisions made by the OMP. It was, thus, imperative to ensure that the decision made about the fitness status of employees was fair and justified.

The Department of Mineral Resources recruited Dr Mokoboto as a Director in the policy unit in 2006, where she was responsible for identifying legislative gaps and making recommendations for drafting the necessary legislation required by the MHSI. After a year in the position, the Department decided that Dipalesa would be well placed as a Medical Inspector, as she was a medical doctor with postgraduate qualifications in occupational health and experience in the mining industry.

Dr Mokoboto was then legally appointed as the Medical Inspector of Mines, in line with section 49(1)(b) of the Mine Health and Safety Act (MHSA). During her tenure, she had the opportunity to assist mineworkers who were unfairly declared unfit for their occupations. This was possible through section 20 of the MHSA, which affords mineworkers the right to appeal the OMP's decision regarding their 'unfitness' status. As the Medical Inspector, she investigated all section 20 medical disputes by the mineworkers and made a final ruling on their fitness status. Essentially, she acted as an ombudsman on matters related to the fitness to work of employees. This proved to be challenging, albeit satisfying, especially when the worker could retain their job.

The MHSA encourages tripartism, and Dipalesa found herself representing the State in several committees of the Mine Health and Safety Council (MHSC). She chaired and served on the Mining Occupational Health Advisory Committee (MOHAC), and the Mining Industry TB and HIV Advisory Committee (MITHAC). She also serves on the MHSC Board and the *Occupational Health Southern Africa* Editorial Board. She was appointed by the Director General (DG) to represent the State on the Tshamiso Trust Advisory Committee, as she had been assisting the Department with queries related to compensation matters.

Dr Mokoboto has contributed to occupational health through many avenues. She was the first government official appointed as President of the Mine Medical Professionals Association (MMPA), and has served as a guest lecturer for

Postgraduate Diploma in Occupational Health (PG DOH) students at the University of Pretoria and the University of the Witwatersrand.

As a MOHAC and MITHAC committee member, she has successfully contributed to drafting legislation for the mining industry on matters related to occupational medicine, TB, and HIV – being the lead person on guidelines related to fitness to work and medical incapacity. She has also collaborated with the National Institute for Occupational Health (NIOH) and the World Bank to estimate the prevalence of HIV in the mining industry. The recommendations from the collaboration resulted in mines reporting TB and HIV data to the Department, which they continue to do to date. The data received are key in determining trends and legislative gaps.

As the Medical Inspector of Mines, Dipalesa was tasked with developing regulations on the reporting of occupational diseases by the mines to the Department. The Medical Inspector developed a reporting form – the Health Incident Reporting (HIR) form – which mines have used to report occupational diseases ever since. The regulations drafted by the Medical Inspector were promulgated to guide the industry in the reporting of occupational diseases.

Being a medical person dealing with legislation led to an interest in medical law, which resulted in a Master of Philosophy in the field of Medical Law and Ethics from the University of Pretoria in 2019, and a dissertation on 'The impact of dual loyalty on health care practitioners' decisions', focusing on the mining industry, and involving OMPs. The occupational health space has been fulfilling for Dipalesa, and she has completely forgotten that her initial interest was in dermatology.

Dipalesa prefers to work under the radar and, as a result, people who don't know her are surprised when they do meet her, as they expect a huge person, and not the petite one that she is. Dynamite does come in small packages. 📌

Occupational noise-induced hearing loss in Africa: gaps in hearing conservation, regulatory frameworks, and the role of worker unions

K Khoza-Shangase 

Department of Audiology, School of Human and Community Development, University of the Witwatersrand, Johannesburg, South Africa

Correspondence

Prof. Katijah Khoza-Shangase
e-mail: Katijah.Khoza-Shangase@wits.ac.za

Keywords

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How to cite this paper

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ABSTRACT

Background: Occupational noise-induced hearing loss (ONIHL) is a persistent occupational health challenge in Africa. Despite regulatory frameworks and hearing conservation programmes (HCPs), implementation is inconsistent, and the role of workers' unions in advocating for hearing health remains underexplored.

Objectives: This review analyses ONIHL prevalence and risk factors, identifies gaps in HCP implementation, evaluates the role of trade unions, examines policy and regulatory frameworks, and considers emerging technological innovations relevant to ONIHL mitigation in sub-Saharan Africa.

Methods: A narrative review methodology synthesised findings from 42 studies, categorised by ONIHL prevalence, HCP effectiveness, union involvement, and policy frameworks. Thematic analysis was used to identify key trends and gaps.

Results: The prevalence of ONIHL remains high in the mining, manufacturing, and transport sectors, driven by prolonged noise exposure, poor compliance, and limited access to preventive audiology. Hearing conservation programmes are inconsistently applied, and employer accountability is weak. Trade union involvement is limited, although global benchmarks illustrate their potential in driving policy reforms. African regulatory enforcement is fragmented, while emerging technologies, such as tele-audiology, digital noise monitoring, and artificial intelligence- (AI-) driven risk assessment present opportunities for early detection and prevention.

Conclusion: Strengthening ONIHL prevention requires stricter regulatory enforcement, stronger employer accountability, and enhanced union engagement, alongside investment in innovative technologies. Regional harmonisation of noise exposure regulations and standardised HCPs are critical to reduce ONIHL risks and improve worker health outcomes.

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Macro-environment determinants of occupational injury and illness reporting: a comparison between low- and middle-income workers in South Africa

WF Mudenha¹, T Singh^{1,2}, E Musenge³, N Naicker^{1,2}

¹ Department of Environmental Health, University of Johannesburg, Doornfontein Campus, Johannesburg, South Africa

² National Institute for Occupational Health, National Health Laboratory Service, Johannesburg, South Africa

³ Division of Epidemiology and Biostatistics, School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

Correspondence

Mr Wellington Farai Mudenha
e-mail: wellingtonmudenha@gmail.com

Keywords

occupational incidents, construction, mining, manufacturing, OHS reporting

How to cite this paper

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doi: 10.62380/ohsa.2025.31.4.2

ABSTRACT

Background: Mining, construction, and manufacturing are among the most hazardous industries, globally, with high rates of occupational injuries and illnesses. In South Africa, the Occupational Health and Safety Act and Mine Health and Safety Act require workers to report occupational incidents, but under-reporting remains widespread. Studies have largely focused on workplace-level micro-factors, with limited attention to broader macro-environment influences.

Objective: We examined whether macro-environment economic, political and legal, demographic, socio-cultural, and technological factors outside the workplace influence reporting of injuries and illnesses, and compared reporting patterns between low- and middle-income workers.

Methods: A cross-sectional sequential mixed-methods design was used. Phase 1 involved convenience sampling of 273 low- and middle-income workers in six mining, construction, and manufacturing companies in Gauteng province, South Africa who completed a structured questionnaire. Quantitative data were analysed using SPSS and Stata. Content and construct validity were established using Cronbach's alpha, exploratory, and confirmatory factor analysis. Bivariate analysis was conducted for pairs of categorical data and Pearson's Chi-square was used to assess associations between macro-environment factors and reporting. Univariate and multivariable linear regression analyses (using ordinary least squares) examined how macro-environment and other demographic independent variables influenced reporting. Statistical significance was set at 5%. In phase 2, seven qualitative interviews were held with occupational health and safety (OHS) experts, and analysed using thematic and narrative analysis, with triangulation used to enhance validity.

Results: The response rate was 70.8%. The study participants were predominantly male (88.2%), black African (87.6%), low income (63.3%), and with an education of grade 12 or below (76.9%). More than 94% expressed willingness to report incidents, influenced by employer support and system accessibility. However, macro-environment barriers affected reporting: social factors (language, racial dynamics), economic factors (fear of job loss, reduced income during recovery, reassignment to lower-paid light duty roles, denied promotions or benefits for reporting), and demographic challenges (age-related employment vulnerability). Expert interviews highlighted cultural factors, migrant worker limitations, and Zero Harm incentive schemes. Regression analyses indicated significant associations between reporting and education (post-high school), income group (middle income), industry (manufacturing), and having received OHS training.

Conclusion: Although legislative frameworks support reporting, macro-environment economic, social, and demographic barriers may undermine workers' reporting behaviour. Interventions addressing these broader contextual factors are needed.

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Aspects hindering hearing conservation programme effectiveness: a narrative review

O Rikhotso¹, TJ Morodi¹, DM Masekameni^{2,3}

¹ Department of Environmental Health, Tshwane University of Technology, Pretoria, South Africa

² Department of Development Studies, School of Social Sciences, University of South Africa, Pretoria, South Africa

³ School of Public Health, University of the Witwatersrand, Johannesburg, South Africa

Correspondence

Dr Oscar Rikhotso

e-mail: rikhotsoo@tut.ac.za

Keywords

audiometric testing, engineering controls, administrative controls, hearing protection devices, noise monitoring

How to cite this paper

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ABSTRACT

Background: Hearing conservation programmes (HCPs) in the manufacturing industry are widespread. However, programme implementation is yet to achieve significant reduction in hearing loss incidence.

Objective: The objective of this narrative literature review was to describe sentiments regarding the efficacy of HCPs.

Methods: A search of the Web of Science Core Collection database focused on HCPs in the manufacturing sector, globally, from January 2002 to December 2022. The search was limited to field studies published in English. The relevant literature was manually analysed for both positive and negative sentiments about the HCP elements, using document analysis.

Results: Fifty-five articles were included in the review. The steel-related industries comprised the largest proportion of the articles included in the review. Negative sentiments about performance of HCPs were reported in most studies. There were limited studies on engineering noise control implementation within HCPs, reflective of industry inaction – a major contributing factor to hearing loss in the sector.

Conclusion: Hearing conservation programme efficacy within the manufacturing sector is hindered by multiple factors, as reflected by negative sentiments. Improvements in HCPs are required urgently to improve hearing conservation efforts in the sector. A digital HCP audit tool, using the findings from this study, could assist employers to identify specific aspects that hinder programme efficacy, and thereby improve engineering controls for noise reduction.

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Real-time monitoring to measure occupational hazards

SJL Linde 

Occupational Hygiene and Health Research Initiative, Faculty of Health Sciences, North-West University, Potchefstroom, South Africa

Correspondence

Prof. Stefan Linde

e-mail: stefan.linde@nwu.ac.za

How to cite this paper

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doi: 10.62380/ohsa.2025.31.4.4

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Machine learning in occupational hygiene/exposure science is on the doorstep

D Brouwer 

Occupational and Environmental Exposure and Health Division, School of Public Health, University of the Witwatersrand, Johannesburg, South Africa

Correspondence

Prof. Derk Brouwer

e-mail: derk.brouwer@wits.ac.za

How to cite this paper

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Report on the International Commission on Occupational Health Symposium: Biohazards at the workplace – magnitude of the problem and potential solutions

Tanusha Singh: Department of Environmental Health, Faculty of Health Sciences, University of Johannesburg, Johannesburg, South Africa; Secretary of Scientific Committee on Biohazards and Occupational Health (SCBOH)
e-mail: tanushas@uj.ac.za

Mary Ross: School of Public Health, University of the Witwatersrand, Johannesburg, South Africa; Past Chair ICOH Working Group on Occupational Infectious Agents and SCBOH; Executive member of the South African Society of Occupational Health (SASOM)

The first mid-term symposium of the Scientific Committee on Biohazards and Occupational Health (SCBOH) was held in Hamburg, Germany, on 6 and 7 October 2025. The event attracted 58 experts, policymakers, and practitioners in occupational health, infectious disease control, and biosafety, from 11 countries across four continents, to exchange views on research, policy, and practice related to biological hazards in the workplace. The symposium marked a significant milestone for SCBOH, formed in 2022 by the International Commission on Occupational Health (ICOH).

The symposium was hosted by the BGW (Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Services) and supported by the International Social Security Association (ISSA), Competence Centre for Epidemiology and Health Services Research for Healthcare Professionals (CVcare), the University Medical Center Hamburg-Eppendorf (UKE), and the International Labour Organization (ILO).

Global collaboration and expertise

The opening session set a strong collaborative tone with welcome remarks from Prof. Albert Nienhaus (SCBOH chairperson), Miriam Stuckert (ISSA), and Prof. Volker Harth (the German Society for Occupational and Environmental Medicine (DGAUM)), followed by Prof. Mary Ross who traced the evolution of SCBOH from its early roots as the Working Group on Occupational Infectious Agents (WGOIA) to a globally recognised scientific committee. Her address celebrated successes during the 19 years of growth from WGOIA to SCBOH, including contribution to the 2021 ILO technical guidance on biological hazards, and the landmark adoption of the 2025 ILO Convention on Biohazards.

Scientific programme

Within the 14 oral presentations and 16 posters, participants covered a diverse range of topics, from infectious disease risks to non-infectious biohazards, such as advances in vaccine prevention and allergies.



Members of the SCBOH in attendance. Left to right: Prof. Stefano Porru, Dr Augustina Puspitasari, Prof. Mary Ross (first SCBOH Chair), Prof. Tanusha Singh (SCBOH Secretary), Prof. Albert Nienhaus (current SCBOH Chair), Mr Fransisco Santos-O'Connor (ILO, Geneva, non-member), Dr Gianluca Spiteri, Dr Marcella Mauro, Dr Guglielmo Dini *Photograph: courtesy of Bianca Hobusch*



Presenter: Prof. Mohamed Jeebhay (South Africa)

Photograph: courtesy of Bianca Hobusch

South Africa was very well represented in the scientific programme, by four speakers and a poster presentation.

Keynote presentations featured:

- Gerd Schneider (Institute for Occupational Safety, Germany): 'Review of the most important workplace biohazards'
- Francisco Santos-O'Connor (ILO, Geneva): 'New international labour standards on biological hazards'
- Dipti Patel (UK): 'Advances in vaccination and travel medicine for global workforces'
- Michael Hodgson (National Institute for Occupational Safety and Health (NIOSH), USA): 'Reflections of the Centers for Disease Control and Prevention (CDC) and NIOSH under the Trump administration'
- Mohamed Jeebhay (University of Cape Town, South Africa): 'Insights into non-infectious biohazards in the workplace'

Additional sessions highlighted tuberculosis prevention and control in work settings, global surveillance of occupational diseases in travellers, changing climates and reshaping risks for outdoor workers, occupational infections among European healthcare workers, biohazards in veterinary practice, and biohazardous risks among sex workers.

The final presentation covered the SCBOH survey on biohazards as an occupational risk, conducted by Prof. Singh and Prof. Ross through the National Secretaries of the 74 ICOH country members. Preliminary analysis of the 32 questionnaires returned was presented by Prof. Singh.

The symposium's poster exhibition showcased innovative work from multiple countries. Poster awards were presented to:

- Spiteri G, Monaco MGL, Porru S (Italy): 'Vaccine-preventable diseases in healthcare workers and fitness for work: challenges for occupational physicians'

- Rifki AIM, Fachrulrazy D, Hidayat R, Gama R (Indonesia): 'Integrating vector control and occupational health economics: a spatio-temporal model of mosquito-borne disease prevention in Pertamina of mosquito stings in outdoor workers'
- Peitler H, Barnekow T, Nienhaus A (Germany): 'Hantavirus infections as an occupational disease among insured individuals in healthcare and welfare services'

These contributions exemplified the SCBOH's One Health vision and the growing integration of data-driven approaches in occupational biohazard research.

The symposium concluded with a post-conference workshop at the Museum for Medical History at the University Clinics Hamburg, offering a reflective journey through *The History of Pandemics*, emphasising occupational epidemics, including the recent COVID-19 pandemic.

Future focus for the SCBOH

Following the various challenges and requests expressed by the SCBOH survey participants, a pivotal roundtable discussion on 'The future of SCBOH: plans and priorities' charted the committee's strategic roadmap. Delegates emphasised strengthening surveillance systems, promoting ILO Convention ratification, and enhancing collaboration across global regions. A Call to Action was issued, urging countries to adopt the new ILO Biohazards Convention C192 and Recommendation to ensure protection for all workers. C192 and R209 are the first international legal instruments for biohazards, to which members from the WGOIAs contributed.

The symposium confirmed the enthusiasm of the SCBOH members, the strength of their collective expertise, and the shared purpose to transform the way the world understands, prevents, and manages biohazards at work. [👉](#)



Presenters and question sessions (left to right): Prof. Paolo Durando (Italy), Dr Albert de Frey (South Africa), Prof. Albeit Nienhaus (Germany)

Photograph: courtesy of Bianca Hobusch

8th Mombasa Annual International OSH Conference

23–24 October 2025



Conference Abstracts



Organised by OSH Pro Services and supported by the Technical University of Mombasa, the 8th Mombasa Annual International Occupational Safety and Health Conference was held at the Pridelnn Beach Resort in Mombasa, Kenya on 23–24 October 2025. The theme of the conference was *Dealing with exposure to occupational hazards*. Dr Khanssa Lagdami from the World Maritime University in Malmö, Sweden delivered a conference curtain-raiser public lecture on nutrition and its impact on worker safety in the maritime industry.

A pre-conference Occupational Hygiene Training Workshop on exposure assessment, study design, and implementation was conducted on 22 October 2025 by Prof. Janvier Gasana from the

Global Applied Prevention Center, USA, Ms Mary Cameron from the Health and Safety Executive (HSE), UK, and Dr Anani Afanou from the Norwegian National Institute for Occupational Health. It was held at the Technical University of Mombasa and inaugurated by the university's Vice Chancellor, Prof. Laila Abubakar.

The conference was attended by delegates and speakers from 11 countries (Kenya, Nigeria, South Africa, Ghana, UAE, Norway, Sweden, UK, USA, Canada, Finland). Eminent presenters included Dr Catherine Cornu, Senior Scientific Officer, from the European Chemicals Agency (ECHA) based in Finland, the Presidents of the International Occupational Hygiene Association (IOHA) and OSHAfrica, and experts from the World Maritime University (Malmö, Sweden),



The iconic Mombasa Tusks forming a giant 'M' over Moi Avenue in Mombasa, Kenya

Photograph: <https://creativecommons.org/licenses/by/4.0/> Rob Oo at <https://flickr.com/photos/105105658@N03/53437335723>

Emirates Society of Occupational Medicine (UAE), HSE (UK), Global Applied Prevention Center Inc. (GAPC) (USA), and Norwegian National Institute for Occupational Health.

Oral and poster presentations covered a number of hot-button topics in occupational health and safety, including the impact of climate change and extreme weather on worker health, particularly in Africa; how the integration of new technologies is transforming work, but also causing technostress; and the need for strengthened regulatory frameworks, standards, and training and awareness programmes in Africa as the continent experiences rapid economic development.

A special session was convened by Mr Abdulqadir Suleiman (Norwegian Labour Inspection Authority and OSH Pro Services, Kenya) for key national stakeholders to explore strategies for enhancing chemical safety, hazard communication, and regulatory alignment with the UN Globally Harmonised System (GHS) for classification and labelling of chemicals. Mr Maxwell Memusi from the Directorate of Occupational Safety and Health Services, Kenya liaised with national agencies and coordinated the programme.

This is a project initiated by the United Nations Environment Programme (UNEP) and European Union (EU) Commission, represented by the ECHA.

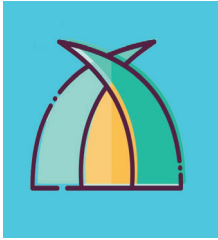
Future plans include using some proceedings from the event to inform a project promoting occupational hygiene training, including work in the informal sector.

The 9th edition of the event will be held during the last quarter of 2026. Dates will be confirmed early in 2026. [📌](#)



Built by the Portuguese between 1593 and 1596, Fort Jesus is a landmark UNESCO World Heritage site in Mombasa

Photograph: courtesy <https://www.freepik.com/>

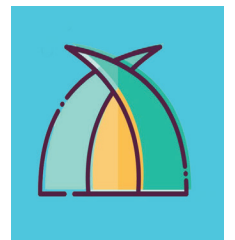


8th Mombasa Annual International OSH Conference

Theme: Dealing with exposures to occupational hazards

22-24 October 2025

Meet the speakers



Dr Anani Komlavi Afanou
Assoc. Prof. (Research),
National Institute Occup.
Health, Norway



Dr Catherine Cornu
Senior Scientific Officer,
European Chemicals Agency,
Finland



Dr Ehi Iden
President, OSHAfrica,
Nigeria



Phd-Cand. Enid Kanyiri
Managing Director,
A&Z Neutraceuticals,
Kenya



Mr Gabriel Tekpetey
OSH Consultant and PMP
Training Provider, Ghana



Prof. Janvier Gasana
President, Global Applied
Prevention Centre, USA



Mr John Waweru
Deputy Director, Occup.
Hygiene Division, DOSHS,
Kenya



Dr Khansa Lagdami
Assoc. Prof. Maritime Law,
World Maritime
University, Sweden



Ms Mary-Kate Cameron
CertOH, HM Special
Inspector, Health and
Safety Executive, BOHS
Board Member, UK



Mr Matthew Olota
President,
International Occupational
Hygiene Association,
Canada



Ms Naadiya Mundy
Managing Director,
Nexam (Pty) Ltd,
South Africa



Dr Nahid Ebinouff
Occupational Physician,
Emirates Society of
Occupational Medicine,
Abu Dhabi

A lineup of some of the conference presenters

Image: courtesy of OSH Pro Services

Other supporters



Oral Presentation Abstracts

Ethics of workplace health and safety inspection and effective reporting

Dr Ehi Iden

President: OSHAfrica; CEO: OHSM, Lagos, Nigeria

Workplace health and safety inspections are essential in identifying hazards and recommendations for corrective actions, and ensuring compliance with workplace laws and regulations towards protecting employees from accidents and injuries, while fostering a positive health and safety culture. The role of the inspector is crucial as it serves as the government's representation within the workplace health and safety structure. A health and safety inspector must be seen to maintain an unbiased position and must be knowledgeable not just about regulations or laws, but also competent in the field of workplace health and safety. He or she must be a thorough professional acting in both the interest of employees, employers, and the government.

Workplace inspections are conducted within the ethics of the profession and this has been overlooked in most cases, leading to poor inspection outcomes not strengthening the health and safety practices in organisations. The ethics of inspections talks about a pre-inspection management meeting, walk-around inspection processes, sighting and reviewing of required documents, documentation of findings, a post-inspection management meeting, and inspection report writing and submission. It is important to keep in mind that this does not involve playing a blame-game.

Writing a good inspection report is a crucial part of inspection. It is the total expression of all findings in terms of hazards, where they are in the organisation, the risk posed, required corrective actions, risk rating, and the urgency of mitigation. This is where most inspectors struggle.

Conclusion: Creating opportunities for training and re-training of occupational safety and health and labour inspectors is a useful tool towards scaling the existing inspection skills of the inspectors



Dr Ehi Iden – President: OSHAfrica; CEO: OHSM, Lagos, Nigeria

Photograph: courtesy of OSH Pro Services

and, by extension, improving workplace health and safety conditions through safe recommendations and enforcement of occupational health and safety laws and regulatory requirements. [📄](#)

A situational analysis of occupational hygiene in Kenya 2024/2025

Mr John A M Waweru

Directorate of Occupational Safety and Health Services, Kenya

In the workplace, employees are likely to be exposed to workplace health hazards and risks. Monitoring workplace contaminants is crucial to maintain exposure levels within acceptable limits. This study was intended to assess compliance with the Occupational Safety and Health Act of 2007, specifically looking at occupiers that carried out noise, ergonomics, light, and air quality measurements and submitted reports to the Directorate of Occupational Safety and Health Information Management System (DOSHMIS) in the period 2024/2025.

In the period 2024/2025 of study, there were 25 961 registered workplaces, and 35 registered experts as air quality monitors. The air quality monitors are registered competent persons who carry out occupational hygiene measurements in workplaces as per the hazardous substances rules of 2007, a subsidiary legislation under the Occupational Safety

and Health Act of 2007. A review of 3 003 occupational hygiene reports from the occupational safety and health information management system covering data in the period 2024/2025 was used. The Microsoft Excel programme was used in data analysis.

The results indicated that 70.4% of noise, 25.2% of air quality pollutants, 3% of light, and 1.4% of ergonomic issues were the most prevalent issues in the total reports analysed. From the results, it was noted that noise surveys were significantly higher than other workplace contaminants evaluated for compliance. One reason is that noise measurement can be performed by anyone, whereas other workplace pollutants require an approved person. It is recommended that more studies should be carried out to establish why there is more compliance with noise measurements. [📄](#)

The impact of new technologies on seafarers and the evolving role of the Maritime Labour Convention (MLC), 2006

Dr Khanssa Lagdami

World Maritime University, Malmö, Sweden

The rapid integration of new technologies, such as automation, digitalisation, and advanced communication systems, is fundamentally transforming life and work on board ships. This presentation examines the multifaceted impact of these advancements on seafarers, highlighting both the opportunities and challenges they present. While technology promises enhanced efficiency, safety, and connectivity, it also introduces risks like technostress, skill gaps, and cyber threats.

Central to managing these changes is the MLC 2006, which serves as the international benchmark for seafarers' rights and welfare. The MLC plays a pivotal role in ensuring that the transition to new technologies does not compromise seafarers' working and living conditions.

Recent amendments to the MLC emphasise access to high-quality meals, medical care, including telehealth, and reasonable internet connectivity, directly addressing some of the challenges posed by technological change. The Convention also underscores the need for continuous training and upskilling, supporting seafarers as they adapt to evolving shipboard roles and responsibilities. However, effective implementation and regular updates of the MLC are essential to keep pace with technological advancements and to ensure that regulatory protections remain robust and relevant. The presentation underscored the importance of proactive regulatory frameworks, social dialogue, and ongoing support for seafarers, ensuring that technological progress in the maritime sector enhances, rather than undermines, occupational safety, health, and overall wellbeing. [🔗](#)

Advancing seafarers' good nutrition and other occupational health on board ships

Dr Khanssa Lagdami

World Maritime University, Malmö, Sweden

Ensuring access to nutritious, high-quality food on board ship is not only a logistical challenge, but a fundamental human right that underpins seafarers' health, safety, and morale. The Food4Seafarers Project, led by the World Maritime University and sponsored by the ITF Seafarers' Trust, was launched in response to persistent gaps in maritime nutrition, despite rising awareness and regulatory frameworks such as Maritime Labour Convention (MLC) Regulation 3.2. This pilot initiative systematically examines the adequacy, variety, and cultural appropriateness of shipboard catering, employing metrics that account for nutritional content, quality, costs, and stakeholder feedback.

Primary research findings highlight that restricted catering budgets, rising food prices, and supply chain complexities continue to undermine the provision of balanced meals at sea. Scarcity of fresh food

and water, weak enforcement of nutrition standards, and limited crew involvement in menu planning further exacerbate these risks, ultimately affecting occupational health outcomes and productivity. The project's multi-stakeholder methods, including interviews with seafarers, cooks, social partners, and ship owners, underscore the need for industry-wide collaboration and policy interventions to prioritise nutrition as a cornerstone of occupational safety.

The presentation addressed why maritime industry-wide action, including enhanced budgets, robust supply chains, and better training, can catalyse a shift from treating good nutrition as a privilege to recognising it as a necessity across global shipping. These recommendations aim to influence both regulatory implementation and everyday practices, supporting resilient occupational health for seafarers and the wider maritime workforce. [🔗](#)



Dr Khanssa Lagdami – World Maritime University, Malmö, Sweden

Introducing the UN GHS safety data sheet

Mr Abdulqadir Suleiman

Norwegian Labour Inspection Authority; OSH Pro Services, Mombasa, Kenya

Safety data sheets (SDSs) are an essential tool for chemical hazard communication. They provide detailed information on chemical substances and mixtures, including safe handling during use, storage, and transport.

The UN globally harmonised system (GHS) for classification and labelling of chemicals provides a standardised SDS format. This is a 16-section format SDS, covering identification, hazard details, composition, first-aid measures, fire-fighting techniques, accidental release procedures, handling and storage, exposure controls, physical and chemical properties, stability and reactivity, toxicological data, ecological impact, disposal considerations, transport information, regulatory data, and other relevant details. Each section has several subsections that specify the relevant information required, ensuring comprehensive chemical information.

The most recent revision of the GHS (Rev. 8) introduced updates to SDS content, including new classification criteria, hazard communication elements, and guidance for chemicals under pressure. These enhancements aim to improve global consistency, reduce



Mr Abdulqadir Suleiman (Norwegian Labour Inspection Authority and OSH Pro Services, Kenya) and 8th Mombasa Annual International OSH Conference organiser *Photograph: OSH Pro Services*

risks, and support regulatory compliance across industries. Safety data sheets are essential for employers, workers, emergency responders, and regulators to understand chemical risks and implement appropriate safety measures. By harmonising SDS formats and content, GHS facilitates international trade and strengthens workplace safety. [▶](#)

Addressing occupational hygiene priorities in Africa and beyond

Mr Matthew Olota

President: International Occupational Hygiene Association (IOHA), Canada

As we confront a rapidly evolving world of work and the emerging risks that this presents to the worker, the need for strong global standards and practices in safety, health, and wellbeing has never been more critical. This session highlighted key occupational hygiene priorities in Africa and on the global stage, and focused on embedding the newly established fundamental principle and right of safety and health at work into the values and strategies of workplaces. A central theme was the lack of applicable regulatory frameworks, the shortage of qualified practitioners, and the need to build more partnerships to

drive change. We discussed the urgency of building a competent and certified workforce, highlighting successful models from other countries, and the broader global implications of such efforts. Additionally, we addressed the challenges of reaching informal and vulnerable workers, and suggest strategies to extend occupational hygiene prevention efforts and worker protection to those often excluded from traditional frameworks. Finally, the session considered the role of advocacy and the call for a collective response to ensure that these vital issues are embedded in future work environments. [▶](#)

Bridging complexity and comprehension: comics as a tool for occupational hygiene knowledge dissemination

Ms Naadiya Mundy

MD: Nexam (Pty) Ltd, South Africa

Effective communication is central to advancing occupational hygiene, yet the field's technical language and complex data often limit engagement among workers and the wider public. Cartoons and comics have proven effective as knowledge-translation tools in science communication (Farinella, 2018) and information-literacy education (McNicol, 2016), offering humour, relatable characters, and visual storytelling to simplify complex exposure-science concepts and capture attention across literacy levels.

Visual representations enhance learning and retention (Nesbit and Adesope, 2006), while pictorial health education materials have

repeatedly shown improved comprehension and engagement among audiences with varied literacy levels (Houts et al., 2006). Applying these principles to occupational hygiene demonstrates how original comics can stimulate dialogue in diverse workplace settings, while maintaining scientific accuracy and cultural relevance, consistent with WHO guidance on risk communication and community engagement (WHO, 2021). Integrating visual narratives into training, outreach campaigns, and professional development can, therefore, strengthen awareness and support safer work environments. [▶](#)



Participants enjoying a view of the magnificent Kenyan coastline Photograph: courtesy of OSH Pro Services

Occupational medicine in Africa: a critical frontier

Dr Nahid Yassin Hussain Ebinouff

Capital Health Screening Centre, Abu Dhabi, UAE

Occupational medicine focuses on protecting workers' health, safety, and performance by preventing and managing work-related injuries and illnesses. It promotes collaboration among employers, regulators, insurers, and health professionals to create safer workplaces. Globally, nearly three million deaths and over 395 million non-fatal injuries occur annually due to occupational hazards – Africa contributes significantly to this toll.

Africa's rapid economic growth has intensified exposure to high-risk industries. Agriculture, which will employ 30–80% of the workforce by 2025, exposes workers to respiratory illnesses, pesticide toxicity, heat-related conditions, and zoonotic diseases. Mining, with Africa holding nearly 30% of the world's mineral resources, presents risks from hazardous dusts, heavy metals, and crystalline silica. Construction and chemical industries – covering fertilisers, plastics, paints, and pharmaceuticals – add further threats.

Despite these risks, occupational medicine in Africa faces major challenges. Many countries lack strong regulatory frameworks, and

enforcement is often weak. There is a shortage of trained professionals, including occupational physicians, nurses, hygienists, and health, safety, and environment (HSE) officers. Limited data on workplace injuries and diseases hamper targeted interventions. Mental health conditions, epilepsy, heart disease, and substance abuse also pose risks in safety-critical roles.

To improve occupational health services, Africa must strengthen legislation, raise awareness, and expand training programmes. Support from organisations like the African Union, World Health Organization (WHO), and International Labour Organization (ILO) is vital. Investing in personal protective equipment (PPE), workplace resources, and research will drive evidence-based practices.

Ultimately, healthier workplaces mean healthier workers. Strengthening occupational medicine is essential for safeguarding lives and boosting productivity across the continent. [👉](#)

Hearing protective devices fit testing

Ms Mary-Kate Cameron

Health and Safety Executive (HSE), UK

Ensuring that hearing protection devices (HPDs) deliver effective protection requires more than simply issuing them to workers. Selection errors, poor fit, or lack of care can all compromise protection and increase the risk of noise-induced hearing loss. This presentation explores the importance of both adequacy and suitability when selecting HPDs, and demonstrates how HPD fit testing provides a critical insight from laboratory attenuation data to real-world performance. Fit testing verifies the actual noise reduction an individual achieves while wearing their particular HPD with their particular fit. Methods such as field microphone in real ear, real-ear attenuation at threshold,

and loudness balance tests provide personal attenuation figures. Fit testing can be incorporated into hearing conservation programmes, alongside worker training and audiometric surveillance.

Fit testing offers multiple benefits: it educates wearers on proper HPD fit, reinforces safe practices, highlights over-protection risks, and documents effective training and equipment selection. Ultimately, HPD fit testing ensures that the workers' hearing protection is not just provided, but also proven to work for them, strengthening hearing conservation efforts and safeguarding workers' long-term health. [👉](#)

Hand-arm vibration – a database approach to exposure assessment

Ms Mary-Kate Cameron

Health and Safety Executive (HSE), UK

Assessing hand-arm vibration (HAV) exposure is an important aspect of HAV risk management. On-tool vibration magnitude measurements are often considered in this approach, but this can be time consuming, costly, and often unnecessary when reliable data already exist. This presentation introduces a practical, database-driven approach to assessing HAV exposure. By utilising established online databases of vibration magnitude values – collected in compliance with BS EN ISO 5349 – occupational hygienists can carry out effective desk-based assessments for many typical tools and their application.

The process involves building an inventory of the site's vibrating equipment, populating it with reliable vibration magnitude data, and applying professional judgement to estimate exposures. Tools without

reliable database matches can then be prioritised for site-based on-tool measurement, focusing effort where it is most needed. This method not only saves significant time and resources, but also supports proportionate risk management, guiding employers toward effective control measures, health surveillance, and training, rather than time and money spent on superfluous measurements.

Importantly, the database emphasis shifts from forensic precision to practical judgement – providing reasonable exposure estimates that enable quick actions towards worker health protection. The database approach streamlines the HAV risk assessment, while ensuring confidence in outcomes and prioritising risk reduction over exhaustive measurement. [▶](#)

Climate and extreme weather – resilient occupational health: preventing occupational and environmental hazards in workers in Africa, and beyond

Prof. Janvier Gasana

Global Applied Prevention Center Inc., USA

Climate change and extreme weather events pose significant occupational health risks to workers worldwide, particularly in Africa. Rising temperatures, changing precipitation patterns, and increased frequency of extreme weather events can lead to heat stress, vector-borne diseases, and other health problems. This congress topic focused on the impact of climate change on occupational health, highlighting the need for resilient occupational health systems to prevent occupational and environmental hazards.

Key discussion points were 1) climate change and occupational health – understanding the impact of climate change on worker health and safety, 2) extreme weather events and occupational hazards – identifying occupational hazards associated with extreme weather events,

3) resilient occupational health systems – developing strategies for building resilient occupational health systems, and 4) prevention and mitigation – implementing effective prevention and mitigation measures to protect workers.

The objectives are 1) raise awareness about the impact of climate change on occupational health, 2) share best practices for building resilient occupational health systems, and 3) foster collaboration among stakeholders to address occupational health risks. The expected outcomes are 1) increased awareness about the impact of climate change on occupational health, 2) improved resilience of occupational health systems, and 3) effective prevention and mitigation measures to protect workers. [▶](#)

Building strong occupational health: exposure assessment, study design, and implementation

Prof. Janvier Gasana

Global Applied Prevention Center Inc., USA

This pre-congress workshop familiarised participants with concepts in assessing human exposures to environmental and occupational contaminants. It provided information on different sources and routes of exposures, the various methods applied to assess these exposures, and the challenges faced by population-based studies that relate such exposures to health outcomes. It provided an overview of all aspects of environmental exposure assessment.

Exposure assessment is a key component of environmental health and the goal of much of environmental monitoring. The extent, duration, frequency, and magnitude of exposures to chemicals are estimated via various routes (ingestion, inhalation, dermal, or in utero) for individuals/populations. Indirect approach – pollutant concentrations are measured in various locations or during specific human activities to predict exposure distributions within populations – environmental monitoring. Exposures can be estimated by measuring chemical levels in various body tissues (such as hair, blood, and urine) as biomarkers or by using various mathematical models. Direct approach – pollutant

concentrations are directly monitored on or within persons through point of contact, biological monitoring (biomarkers).

Exposure science evaluates various problems, because humans (and other species) can encounter physical, chemical, biological, and psychosocial hazards every day, and during natural and other catastrophic events. This workshop covered all major exposure media (air, water, food, soil, etc.) and all the important pathways (inhalation, ingestion, absorption, etc.). It also included exposure assessment study design/implementation with examples, the strengths and weaknesses of various exposure assessment techniques, and how to link exposure assessment with environmental health. Implementation involves 1) study design, 2) data collection, 3) data analysis, 4) interpretation of results, and 5) dissemination of results.

Methods are 1) monitoring – collecting data on exposure levels through air, water, or soil sampling, 2) modeling – using mathematical models to estimate exposure levels, and 3) questionnaires and surveys: collecting self-reported data on exposure. [▶](#)

Poster Presentation Abstracts

Evaluation of work-related musculoskeletal disorders among housekeepers in selected hotels in Mombasa County

Ms Enid Kanyiri

Director, A&Z Nutraceuticals Ltd, Kenya

Background

Work-related musculoskeletal disorders (WRMSDs) affect primarily muscles, tendons, joints, intervertebral discs, peripheral nerves, and the vascular system. Work-related musculoskeletal disorders are a worldwide issue and are experienced by workers in both developed countries and industrially developing countries (IDCs). The prevalence of WRMSDs and their risk factors are not well known among hotel housekeepers in Kenya. Therefore, this study aimed to assess the annual prevalence of WRMSDs, determine the risk factors associated with WRMSDs, and analyse strategies to prevent WRMSDs among housekeepers in selected hotels in Mombasa County.

Methods

The sample size of 276 housekeepers was obtained by considering all the housekeepers working at 18 purposefully selected hotels at the time of study. Data were collected using semi-structured questionnaires. The study used both qualitative and quantitative data analysis. The Statistical Package for Social Sciences (SPSS 23)

was used for analysis. This study used descriptive and inferential statistical analysis to analyse quantitative data collected from the structured questions. Descriptive statistical analysis, including frequencies and percentages, and inferential statistical analysis, including the Chi-square test and linear regression, were used to establish the association between variables.

Results

The study found that the housekeepers who had experienced regular joint and muscle pain within a year were 91.7%. Lower back pain was the most common WRMD reported. Leg, shoulder, and neck joint and muscle pain was also reported, resulting from carrying/lifting and pulling/pushing heavy items weighing > 20 kgs.

Conclusion and recommendation

This study recommends that hotels employ adequate staff to ensure reasonable breaks, job rotation, and teamwork. The hotels should also consider mechanisation of equipment, practical training, and reinforcing laws through health committees. [📄](#)

Creating awareness of health and safety risks, both at work and at home

Ms Margaret M Musango

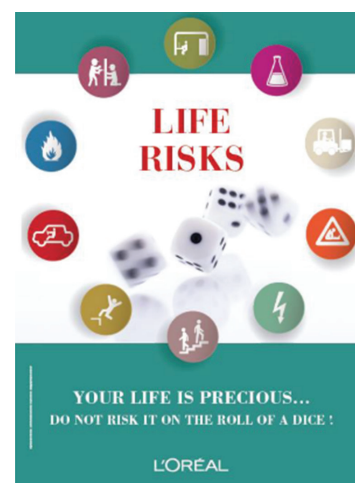
EHS Manager: L'Oréal East Africa, Kenya

Workplaces present different kinds of hazards, some of which could be department-specific. The risks arising from these hazards could vary across different departments. Most of these risks are found both at work and beyond, although most individuals tend to switch off their safety mindset as they leave the workplace. It is, therefore, important to build on a safety culture at work and spread it beyond.

At the beginning of each month, the safety department at L'Oréal East Africa sends department managers the LIFE topic of the month. This includes the conversation starter cards (which have guide questions, as well as the company procedure on the particular LIFE risk. The topic guides the safety moments/safety contacts held before the start of meetings throughout the month. The department managers, with the support of the EHS team, guide the teams through the risks relating to the theme topic and reflect on associated risks at home.

At the end of the month, the department manager reverts with a communication register as well as team commitments for the LIFE risk both at work and at home.

For select LIFE risks, we collaborate with parents and send age-customised questionnaires to guide the LIFE risk discussion with their children. [📄](#)



Linking quantum weirdness with occupational safety and health assessments in the 21st century and beyond

Prof. Charles FL Mbakaya

PhD

Background

While occupational safety and health (OSH) is a science largely informed by measurements in the work environment, this may be subject to the measurement problem of the observer. No wonder the United Nations has declared 2025 the International Year of Quantum Science and Technology.

Objectives

To draw the attention of OSH specialists to quantum weirdness and its possible impact on the field.

Methods

I used theoretical frameworks that bring on board chemistry, physics, theology, history, OSH, and philosophy in a manner that is abductive and practical in reasoning, rather than the contemporary but limited inductive scientific method and theoretical reasoning.

Results and Discussion

I have hypothesised/theorised elsewhere that matter in the universe was intelligently created, with gravity as the binder, and subsequently bombarded with the created light/dark energy (Big Bang)

to birth immobile and mobile non-matter (dark matter/aether) in a cyclic process that is maybe faster than the speed of light, complicating reality and the science of measurement (occupational hygiene included). In essence, my two-way arrow of time is best illustrated by evaporation from oceans being favoured by an increase in entropy, while rainwater falling is favoured by gravitation, with potential energy decreasing; this mechanism also elucidates the orchestration of consciousness in the universe. As for the elusive force of gravity even between the sun and Earth, I posit that it involves sharing chemical moieties such as electrons; this being synonymous with chemical bonding and accounting for the instant Newtonian Gravity. So, while Newton may have been describing this part of gravity that instantly pulls, Einstein may have focused on the other, but complementary, part that pushes the chemical mediating moieties in space-time as during evaporation.

Conclusion

Cognisant of the quantum weirdness herein, more refined tools of measurement, including attosecond technologies, may be indicated for use by OSH specialists even to study how chemical hazards impact the hard problem of consciousness, among other things. [📄](#)



Conference participants Photograph: courtesy of OSH Pro Services

Beyond job titles: the evolution of essential services designation for tailings dams

Kate Collier: Partner, Webber Wentzel

Amy King: Knowledge Lawyer, Webber Wentzel

A service-based approach to essential services marks a significant shift in how tailings dam operators must approach workforce classification and labour relations, with positive impacts for meeting occupational health and safety imperatives.

The Essential Services Committee's (ESC) recent decision to expand the designation of essential services at tailings dams is more than a simple broadening of scope. It is a fundamental shift from focusing on who performs a service to what service is being performed, culminating in the expansion of essential services based on the recognition of the importance of the safety role played by personnel involved in the management and oversight of tailings dams.

When the ESC first designated services rendered by mud guards and team leaders at tailings dams as essential services on 11 May 2018, it inadvertently created a loophole. Subsequent referrals in terms of section 73(1)(a) and (b) of the Labour Relations Act (LRA) revealed that whilst employees rendered the same or similar services to those performed by 'mud guards' and team leaders, different job titles were used to describe these employees. This resulted in employers and employees finding themselves in disputes about whether the essential services designation applied, with the answer turning on terminology, rather than the substance of the work and services being performed by the persons in these roles.

This prompted the ESC to initiate an investigation to review the designation to determine the actual service as opposed to who renders the service. The shift from a position-based to a service-based approach is not merely semantic, it reflects a deeper understanding of how essential services should be identified and regulated in complex industrial environments, particularly where health and safety are at stake.

This may open the door for a broader approach to considerations of the importance of protecting the health and safety of employees, and non-employees who may be impacted by an employer's operations and the risks that may be presented when employees tasked with health and safety obligations go on strike. This decision highlights whether the consideration of the protection of health and safety should be so essential such that the persons who perform those roles should be prevented from striking.

The ESC's approach must be understood within the constitutional framework governing the right to strike. The Constitutional Court has emphasised that a restrictive interpretation of essential service must, if possible, be adopted so as to avoid impermissibly limiting the right to strike. The law requires that it is the service which is essential, not the industry or the operation within which the service falls; only those employees who are truly performing an essential service may be prohibited from striking; and essential and non-essential service workers may be found working side by side in the

same operation. This then requires balancing the right of employees to strike against the need to protect the health and safety of persons who could be negatively impacted by a failure to perform work that safeguards health and safety, especially of the public.

This framework explains why the ESC took such care to delineate precisely which services at tailings dams are essential and which are not. Before the ESC can designate any service as essential, it must be satisfied that the interruption of the said service is likely to endanger life, personal safety, or health of the whole or part of the population; in this regard, essential services designations play an important role as an occupational health and safety mechanism.

The expanded designation covers two distinct operational areas:

Deposition sites – All services that are necessary for the building and/or construction, maintenance, risk management, including monitoring, inspection, and reporting at tailings dams to ensure the integrity, safety, and stability of the deposition sites and/or tailings dams are essential services. These services are about preventing failures that would endanger workers, communities, and ecosystems. For example, monitoring phreatic surfaces, measuring piezometer readings, and inspecting for seepage are early warning systems that detect structural instability before failure occurs. Relocating pipe systems to prevent overtopping and raising catwalks to manage pool depth are active interventions that maintain the physical integrity of tailings dams. The designation ensures that these critical safety monitoring and maintenance functions continue uninterrupted, regardless of the employee's title.

Hydro mining – The hydro mining component of the designation illustrates the ESC's approach to balancing safety imperatives with constitutional rights. All services performed in hydro mining that relate to ensuring the integrity of the water management system, including monitoring and inspecting pipelines to ensure the integrity of slurry delivery pipes, valves, and water lines that must be inspected in order to timeously identify non-conformance and immediately rectify it, are essential services.

In the reming process, it is imperative that water is properly managed to ensure that the integrity of the tailings dam is not compromised, and that monitoring and inspection of pipelines to ensure the integrity of slurry delivery pipes, valves, and water lines is critical to avoid dam failure due to uncontrolled slurry or water. The ESC recognised that water management integrity is essential, whilst the actual reming operations are not.

What mining operators with tailings dams must do

The service-based approach requires mining operators to assess how they classify their workforce beyond job titles. Instead, operators must conduct a detailed analysis of the functions performed to determine which employees perform services falling within the designation.

On one hand, the designation provides operational continuity for critical safety functions. Ensuring these services continue uninterrupted protects not only the mining operation and its employees, but surrounding communities and ecosystems as well. On the other hand, the designation limits the constitutional right to strike for affected employees. This means operators must be precise in their application of the designation, ensuring they do not overreach by classifying non-essential service workers as essential.

The limitation on the right to strike for employees working in connection with tailings dams has important implications for employers and employees alike. Employers should proactively address this limitation during wage negotiations and collective bargaining processes, but may similarly consider whether the principles are equally applicable to other services, which if withdrawn, may significantly impact the ability to protect the health and safety of persons. They should further assess whether this could support additional stakeholder engagements and applications for other services to be included in essential services designations.

The expanded designation requires immediate action in the form of workforce audits, contract reviews, and employee communications. As the mining industry continues to grapple with the legacy of tailings dams and the imperative of responsible management, this designation provides a foundation for balancing competing interests in a manner that prioritises safety without unnecessarily limiting fundamental rights, provided that employers engage constructively with unions to ensure that employees who perform essential services receive appropriate recognition for the restrictions placed upon them, and for the safety-critical nature of the work they perform in protecting lives and the environment.

Following this ruling, the parties have been directed to negotiate and conclude a minimum service agreement by 29 December 2025, 90 days from the designation, which must in turn be ratified by the ESC. Principles of this agreement may equally shape the landscape of the balancing of the rights to safety and to strike. [👉](#)

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SASOM news

Claudina Nogueira: Occupational health consultant/Research and technical officer, Stellenbosch University, South Africa; SASOM ExCo member; ICOH National Secretary for South Africa (2024–2027); WHWB President (2024–2026)

e-mail: claudinanogueira@hotmail.com

Daan Kocks: SASOM Chair

e-mail: daniel.kocks@up.ac.za

Claudia Frost: SASOM National Office Coordinator

e-mail: office@sasom.org

SASOM HOSTS TWO NATIONAL WEBINARS IN 2025 ON THE INFORMAL SECTOR

The South African Society of Occupational Medicine (SASOM), an affiliate member of the International Commission on Occupational Health (ICOH), organised and hosted two national webinars in 2025, both themed *Occupational Health of Informal and Migrant Workers*. The webinars were presented in collaboration with the Global Coalition for Informal Workers' Health and Wellbeing (GCIW), and the International Human Factors and Ergonomics Association (IEA) Technical Committee on Informal Work (TC IW). Each high-impact webinar was divided into two 2-hour sessions, accredited for Continuing Professional Development (CPD) points by the South African Medical Association (SAMA). The webinars offered local and international participants global perspectives, updated research, and applications to the real world.

SASOM National Webinar 1, 20 June 2025

The webinar was opened by Prof. Daan Kocks, Chair of SASOM, who welcomed the presenters and participants, and introduced the session chairs. Session 1 was sub-themed *Introducing the Global Coalition for Informal Workers Health and Wellbeing (GCIW)*, and chaired by Ms Claudina Nogueira, SASOM Executive Committee (ExCo) member and ICOH National Secretary for South Africa. Presenters and topics were as follows:

- 'Occupational health for informal workers: the Global Coalition for Informal Workers (GCIW) Initiative' was presented by Dr Acran Salmen-Navarro (MD, MSc, AEP) of the Bellevue/New York University (NYU) Occupational Environmental Medicine Clinic, NYU Grossman School of Medicine, USA, and current Chair of the ICOH Scientific Committee on Occupational Health for Health Workers (SC OHHW). He leads the topic of Occupational Health for Migrant Workers in the ICOH Working Group on the Future of Decent Work and, more recently, is one of the leaders spearheading the establishment of the GCIW.

This new coalition is dedicated to safeguarding the health and wellbeing of informal workers across the globe. Its members unite to address the unique challenges faced by individuals engaged in informal employment (around 60% of the global workforce), recognising their invaluable contributions to communities and economies, worldwide.

Dr Salmen-Navarro's presentation set the scene for the webinar by providing background and context on the informal sector from a global perspective. Topics covered included migration; why informal work matters as a social determinant of health; contributions made by migrant and informal workers to national and global

economies; the high risks of vulnerability among migrant and informal workers; new forms of work, including the gig economy; and the future of work.

- 'Bridging informal work and ergonomics: perspectives from the International Ergonomics Association (IEA) Technical Committee on Informal Work' was presented by Clive D'Souza (PhD), Department of Rehabilitation Science and Technology, University of Pittsburgh, USA, and current Chair of the IEA TC IW.

Dr D'Souza provided an overview of the IEA TC IW and its objectives and planned activities for the current year; the key domains of ergonomics and human factors (physical, cognitive, and organisational); the sociotechnical model of ergonomics; and psychosocial factors and worker vulnerabilities in informal economies. He presented a case study on informal electronic waste (e-waste) processing in Ghana, in which he highlighted the interdisciplinarity in addressing informal worker health.

Session 2 was sub-themed *Exposure to occupational heat stress in the informal sector*, and chaired by Dr André Kotzé, Vice Chair of SASOM. Presenters and topics were as follows:

- 'Health effects of occupational heat exposure among informal workers: the South African perspective' was presented by Prof. Rajen Naidoo (MBChB, DOH, MPH, PhD), Head of Discipline of Occupational and Environmental Health, University of KwaZulu-Natal, Durban, South Africa. He discussed how extreme heat is becoming more dangerous for workers every year; informal work in the era of climate change; evidence of heat exposure and heat stress across the African continent; health effects and occupational injuries associated with excessive heat exposure and stress; why informal workers are at greater risk of the health impacts of heat stress; and challenges for heat protection programmes among informal workers. He concluded with necessary and urgent actions and the role that occupational medical practitioners and professional associations can play in managing heat exposure in workplaces, including the informal sector.
- 'Informal women workers on the frontline of the climate crisis: the experience from the Self-Employed Women's Association Bharat (SEWA Bharat) and lessons from India' was presented by Ms Sonal Sharma (MA: Development Studies), senior programme coordinator, SEWA Bharat, India. Ms Sharma is a development practitioner, specialising in informality with a focus on women's economic empowerment. At SEWA Bharat, she has established and expanded programme areas aimed at promoting the growth of women-led micro-enterprises and advancing women's land

rights. She has led and studied community-driven, knowledge-based interventions designed to build resilience and enhance capacity among women in the informal economy. Currently, she is guiding the organisation's exploration of intersections within women's work, such as those between entrepreneurship and the global care agenda, and between livelihoods and climate justice.

Ms Sharma provided an overview and the objectives of SEWA internationally, and more specifically, in India. She also discussed the impact of climate change and environmental degradation on livelihoods, and adaptations by female workers in the informal economy; pathways to a just transition for female workers in the informal economy; and collective action for climate justice, as well as selected key findings and recommendations from a study that gathered insights from more than 1 100 women working in India's informal sector.

Prof. Kocks closed the proceedings by extending appreciation to all presenters for their insightful contributions, as the session greatly enhanced the participants' understanding of occupational health and safety (OHS) and labour issues within the informal sector, from a global perspective (USA, India, and South Africa). He underscored that meaningful progress can be achieved through transformation within the informal sector, using the example of successful e-waste management in Ghana, and stressed that the southern African situation reflects a broader global challenge, and that collective public action remains essential in addressing it. Prof. Kocks also thanked the organisers and session chairs for their support, expertise, and leadership in the various aspects of webinar preparation and delivery. He encouraged participants to remain engaged through the SASOM website and communication channels, and to look out for information about the second webinar later in the year. The recording of the webinar is available in the public domain: <https://www.youtube.com/live/1A77-D97ZrM>

SASOM National Webinar 2, 29 August 2025

The webinar was opened by Dr Itumeleng Ntatamala (SASOM Western Cape Chapter and University of Cape Town, South Africa), who welcomed the presenters and participants, and introduced the moderator of the first session. Speakers in this session discussed the magnitude of unique hazards faced by informal workers globally, particularly in Africa and Asia, emphasising the lack of legal protection, access to health services, and research. The second session explored the political economy of OHS and informality, presenting the migrant-informal worker cross-section as a critical vulnerability. The discussion also featured models of the social determinants of health to understand the complex relationship between informal work and health outcomes, concluding with the need for policy changes, increased professional capacity, and participatory action research to achieve health equity and decent work.

Session 1 was titled 'Occupational health of informal workers: drivers, new forms of work, and OHS challenges', moderated by Dr Acran Salmen-Navarro (GCIW founding member and recently elected president, Chair of ICOH SC OHHW, and New York University Grossman School of Medicine, USA). Presenters and topics were as follows:

- 'Pathways towards decent work for informal workers' was presented by Mr Mahinda Seneviratne (ICOH Board member, immediate Past Chair of the ICOH Scientific Committee on Occupational Health in Small-Scale Enterprises and the Informal Sector (SC OHSSEIS), and work health strategist, Australia). A Fellow of the Australian Institute of Occupational Hygienists, Mr Seneviratne has led significant initiatives, including i) Ghana's first occupational hygiene workshop in 2011 to build occupational hygiene capability in small enterprises, ii) Australia's implementation of the Globally Harmonised System (GHS) for Classification and Labelling of Hazardous Chemicals, and iii) investigations into silicosis among engineered stone manufacturers and installers that led to landmark legal action in Australia in 2024.

WEBINAR

"OCCUPATIONAL HEALTH OF INFORMAL AND MIGRANT WORKERS"

FRIDAY, 20 JUNE 2025



SASOM

South African Society
of Occupational Medicine

FOUNDED IN 1948

MEET OUR SPEAKERS

SESSION 1: 2:00PM - 4:00PM	SESSION 2: 4:00PM - 6:00PM
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p style="margin: 0; font-weight: bold; color: white;">Acran Salmen-Navarro</p> <p style="margin: 0; font-size: 0.8em; color: white;">MD, MSc, AEP (Bellevue/NYU Occupational Environmental Medicine Clinic, New York University Grossman School of Medicine, USA)</p> </div> <div style="text-align: center;">  <p style="margin: 0; font-weight: bold; color: white;">Clive D'Souza PhD</p> <p style="margin: 0; font-size: 0.8em; color: white;">(Department of Rehab Science and Technology, University of Pittsburgh, USA)</p> </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p style="margin: 0; font-weight: bold; color: white;">Rajen Naidoo</p> <p style="margin: 0; font-size: 0.8em; color: white;">MChB, DOH, MPH, PhD (Head of Discipline and Professor, Occupational and Environmental Health, University of KwaZulu-Natal, Durban, South Africa)</p> </div> <div style="text-align: center;">  <p style="margin: 0; font-weight: bold; color: white;">Sonal Sharma</p> <p style="margin: 0; font-size: 0.8em; color: white;">MA: Development Studies (Senior Programme Coordinator, SEWA Bharat, India)</p> </div> </div>



zoom



CPO

Graphic: Claudia Frost (SASOM, South Africa)

Mr Seneviratne provided a brief overview of the OHS of informal workers, detailing specific challenges and proposing future pathways for action. He highlighted that informal workers constitute a large part of the workforce globally, particularly in Africa and Asia (90% or more). They face unique hazards, such as exposure to high temperatures, effects of climate change, and physical dangers. A critical challenge is the lack of access to basic occupational health services: only about 15% of global workers (formal and informal) have access to these services, and legislation often fails to cover them. Suggested pathways include regulatory reform (e.g. shifting legislation concepts from 'employer' to 'person in control' and from 'employee' to 'worker' to expand coverage); improving prevention through better hazard identification and risk control; and implementing participatory action research. The last is crucial to ensure that workers' voices are heard and taken seriously.

- 'The ergonomics/human factors approach to decent work for informal workers: a South African case study' was presented by Prof. Andrew Thatcher (Psychology Department, University of the Witwatersrand, South Africa and President of the IEA). A certified professional ergonomist with the Ergonomics Society of South Africa (ESSA) and a registered industrial psychologist with the Health Professions Council of South Africa (HPCSA), Prof. Thatcher is a member of the Human Factors and Ergonomics Society of the USA, a member of the Academy of Science of South Africa, and has served as Co-Editor-in-Chief of *Ergonomics*.

Prof. Thatcher applied an ergonomics and human factors approach to understanding informal workers, using a case study of Warrick Junction, an informal trading market in Durban, KwaZulu-Natal province, South Africa. He noted that extreme inequality and high unemployment rates (over 30% in South Africa) drive people into informal work. Ergonomics is viewed as a design discipline that focuses on optimising system performance and wellbeing (psychological and physical) by considering the system of tasks, tools, and environment. The case study revealed that informal workers, such as cooks of bovine and sheep heads, and water transporters, work under extreme conditions, including exceptionally long working days (up to 15.5 hours) and minimal sleep (as little as 4.5 hours nightly). The ergonomic approach emphasises joint optimisation – integrating formal and informal systems, treating humans as assets, and fostering solutions collaboratively with workers.

- 'Closing the gap: occupational health, poverty, and decent work for informal workers' was presented by Mr Matthew Olota, a chartered occupational hygienist at Irving Oil Limited, New Brunswick, Canada, with more than 15 years of experience across oil and gas, manufacturing, and aviation industries. Mr Olota is President-Elect of the International Occupational Hygiene Association (IOHA) and Board representative of the Association of Industrial Hygienists Nigeria (AIHN). He has led occupational health programmes involving multidisciplinary teams and is highly skilled in health risk assessment, medical surveillance, and workplace health evaluations.

Mr Olota's presentation focused on the occupational hygiene challenges and the need to close the gap for informal workers. He cited sobering International Labour Organization (ILO) data, indicating that 2.93 million people die annually from work, with

2.6 million deaths from occupational diseases. He emphasised that informal workers (60% of the global workforce) are real people facing real exposures, but they lack professional services such as exposure assessment and medical surveillance. A central challenge is poverty, which makes protective measures unsustainable (e.g. a low-earning worker cannot afford expensive disposable respirators). He highlighted the severe global deficit of certified occupational hygienists (e.g. Africa has 0.5 hygienists per million workers). Proposed solutions included increasing capacity building, utilising low-cost assessment tools and controls (e.g. free health apps), driving systemic change through effective policy and partnerships (especially in terms of engaging politicians and media), and demonstrating value through improved national data collection.

Session 2 was titled 'Occupational health of informal and migrant workers: community engagement and collective action', moderated by Dr Maggie Graf (GCIW founding member and recently elected Treasurer, and Immediate Past Vice President and Secretary General of IEA, Switzerland), who currently serves as the European coordinator of the IEA TC IW. Presenters and topics were as follows:

- 'Political economy of OHS and informality: the struggle for health justice for workers in the informal economy' was presented by Dr Christy Adeola Braham (Workers' Health Coordinator at Women in Informal Employment: Globalizing and Organizing (WIEGO), UK and Belgium). Dr Braham is a public health specialist and doctoral fellow, School of Health and Related Research, University of Sheffield, UK. At WIEGO, she leads health research and advocacy to strengthen grassroots workers' organisations and advance OHS and the right to health for all in the informal economy. A Senior Atlantic Fellow for Health Equity at the Milken Institute School of Public Health at George Washington University, she has coordinated regional health and migration platforms, represented WIEGO in International Labour Conference negotiations for global standards on biological hazards in the working environment, 2024–2025 (ILO Convention 192 and Recommendation 209), and contributed to the Wellcome Collection exhibition 'Hard Graft: Work, Health and Rights' (2024, London, UK).

Dr Braham discussed the political economy and the struggle for health justice for informal workers. She established that informality is the norm and is growing globally. Workers in this sector (waste pickers, street vendors, home-based workers, etc.) lack fundamental protections, often operating outside OHS laws in public or private spaces that are not recognised as legitimate workplaces. This forces workers to be self-reliant amidst extreme income insecurity. She stressed that challenges are fundamentally political, caused by poor collaboration between government ministries, and a systematic lack of value given to marginalised workers. She presented examples of effective grassroots action: the Indonesian Migrant Domestic Workers Association (PERTIMIG) educating members on negotiating vaccination access, and HomeNet Thailand integrating OHS services into universal coverage through mobile vans and enhanced surveillance.

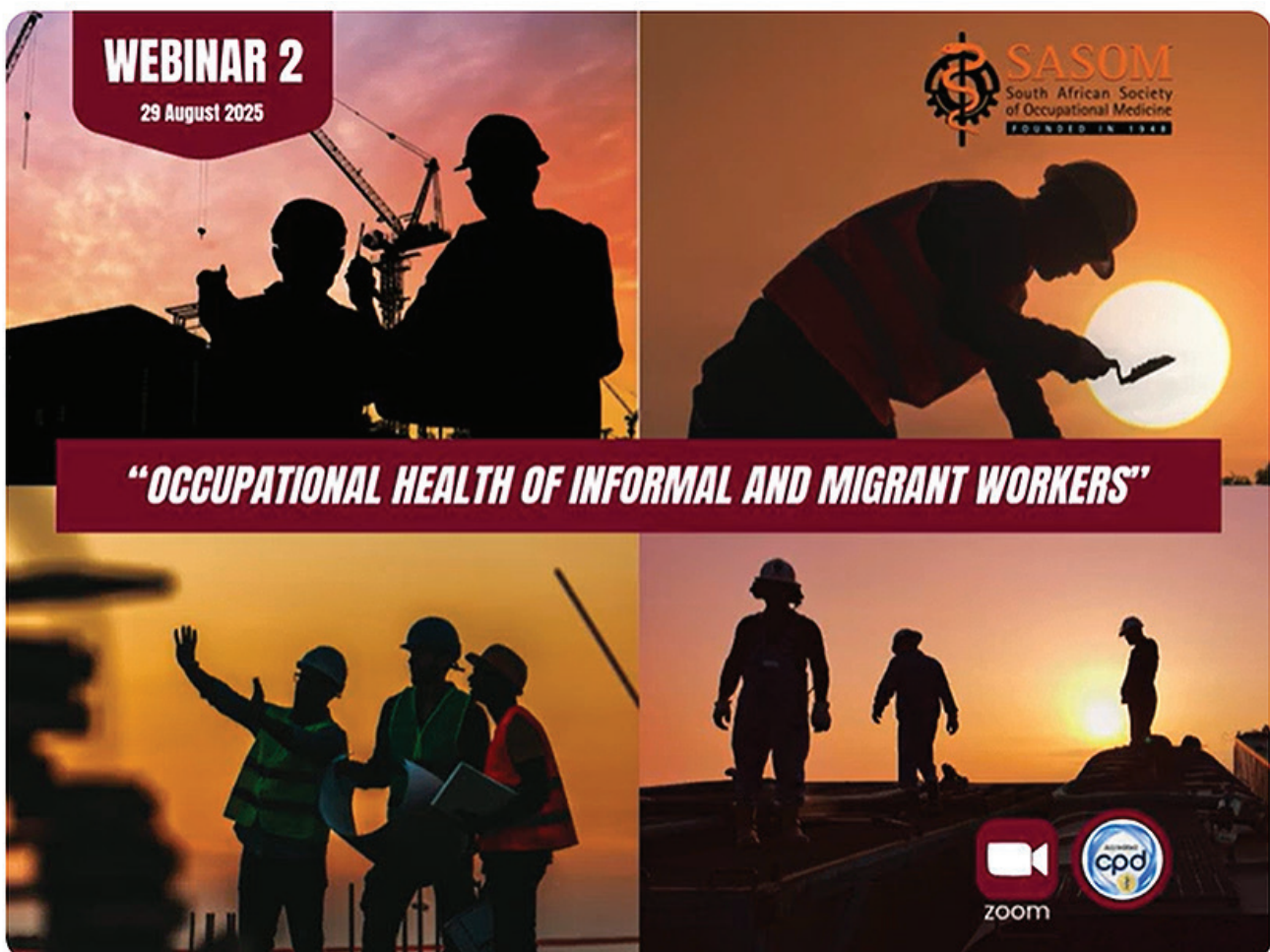
- 'Occupational health for vulnerable workers: the cross-section between migration and informal work' was presented by Dr Acran Salmen-Navarro, moderator of Session 1 (GCIW founding member and recently elected president, Chair of the ICOH SC OHHW, and NYU Grossman School of Medicine, USA). He focused

on the cross-section of migration and informal work, asserting that work is implicit in nearly all social determinants of health. The main drive for migration is often work, and approximately 65% of migrants are prone to entering the informal sector in their host countries. Migrants frequently encounter precarious '4D jobs' (dirty, dangerous, demanding, and discriminatory). Clinically, these workers present unique challenges, sometimes consulting a doctor for the first time in their life, for an occupational injury. Despite vulnerability, they contribute significantly to global economies through remittances (nearly US\$ 800 billion in 2022) and local economies (e.g. foreign-born New Yorkers contributed 22% of city GDP in 2017). Good practices include offering clinical and preventive services, regardless of ability to pay or status, such as at the Bellevue NYU clinic, and partnering with community-based organisations (CBOs) to perform outreach. He emphasised preparing for the future of decent work, which must address new forms of informal work such as app-based and entrepreneurial options.

- 'Informal work as a social determinant of health' was presented by Prof. Carlos Andrés Fandiño Losada (Chair of the Organising Committee of the First International Conference of the GCIW, and *Universidad del Valle*, Santiago de Cali, Colombia). He is a medical doctor and epidemiologist with a PhD in Medical Sciences from the Karolinska Institute, Sweden. He has worked in the Department of Public Health at the School of Health of *Universidad del Valle*, Colombia since 2010, initially appointed as an assistant professor, and becoming a full professor in 2024. He was appointed

as Editor-in-Chief of *Colombia Médica* in 2025 and serves as an associate editor for *Cambridge Prisms: Global Mental Health*. His career includes consultancy work for the Pan-American Health Organization (PAHO) in Colombia's Ministry of Health in Bogotá, and multiple academic collaborations in Latin America and Europe, along with several prestigious awards.

Prof. Fandiño Losada provided a theoretical framework for informal work as a social determinant of health. Using models like the Dahlgren-Whitehead model, he positioned informal work within the layer of living and working conditions. This model is a visual tool, often called the 'rainbow', which maps the relationship between individual, environment, and health by illustrating the layers of determinants that influence health outcomes. It organises these determinants from the individual outward, starting with individual lifestyle factors, moving to social networks and, finally, to broader socioeconomic and environmental conditions. Informal employment is characterised as a form of precarious work. He highlighted that research findings on health consequences (such as mental health, injuries, and mortality) are inconsistent and complex, and often dependent on the reference group used for comparison (e.g. formal workers versus unemployed). While informal work can be linked to poor health and exposure to risk, in specific contexts, some studies show a neutral or even protective effect of working in the informal sector (e.g. allowing for more breastfeeding time for certain urban workers). He concluded that a multi-level research



Graphic: Claudia Frost (SASOM, South Africa)

approach is necessary to understand the structural context that shapes the health consequences of informal work, and to reduce health inequalities.

Dr Geoffrey Tafaune (SASOM Treasurer and University of Pretoria, South Africa) closed the proceedings by wrapping up the event and thanking the organisers, presenters and participants for a successful webinar. The recording of the webinar is available in the public domain: https://www.youtube.com/watch?v=RhWWwu7iE_o

Congratulations and celebrations

The SASOM ExCo and its members are delighted to extend their hearty congratulations to Mr Deon Jansen van Vuuren, registered occupational hygienist (retired) and General Manager of the Southern African Institute for Occupational Hygiene (SAIOH), sister organisation of SASOM, on being bestowed with the prestigious SAIOH Lifetime Achievement Award at the SAIOH Annual Conference 2025, held recently in Umhlanga, KwaZulu-Natal. This follows the award of another prestigious accolade, the IOHA’s Lifetime Achievement Award in 2024, bestowed on him at the IOHA International Conference in Dublin, Ireland. These awards are testaments to Deon’s illustrious career and lifelong dedication and contribution to the noble profession of occupational hygiene, and its development, at national, regional, and global levels. Congratulations, Deon!

News from the SASOM National Office

SASOM held its Annual General Meeting (AGM) and Conference on 15 November 2025 at the Marriott Hotel Fire & Ice, Menlyn, Pretoria, Gauteng. The hybrid event, themed *Artificial Intelligence (AI) at the Crossroads of Informal Work and Public Health: Risks, Innovations, and Responsibilities*, was hosted and organised by the SASOM National Office in collaboration with GCIW and ESSA. A report on the SASOM Conference is available on pages 169–171 of this issue.

Membership renewals for 2026 will only open after the SASOM AGM. The 2026 membership fees will be confirmed at the AGM on 15 November 2025 and once approved, the renewal portal will be opened, and all current members will be notified by e-mail with instructions to complete their renewal. New applicants can access information about membership and benefits on the website, and follow the instructions for becoming members of SASOM: <https://sasom.org/membership/>

The SASOM National Office will close for the year-end holiday season on 1 December 2025 and re-open on 12 January 2026.

Season’s greetings from SASOM

As the festive season approaches, SASOM reaffirms its commitment to the enduring values of gratitude, mindfulness, hope, and reflection. The Society extends its sincere wishes to all members – and to their families, friends, and communities – for a joyful, safe, and peaceful holiday season, marked by good health, optimism, and many blessings.

SASOM wishes all who celebrate Christmas, or other festive occasions at this time of year, a season filled with peace of mind, compassion, and fulfilment. May the New Year bring continued success, personal wellbeing, and professional growth.

The Society remains steadfast in its commitment to advancing excellence in occupational health and medicine, and to providing meaningful support to its members. SASOM also takes pride in its ongoing collaboration with *Occupational Health Southern Africa*, a valued partner and key source of knowledge and expertise in our region.

SASOM extends its appreciation to all members for their dedication and continued engagement. Together, we look forward to a year ahead marked by growth, impact, and shared achievement. 📌



There’s Strength in Knowing Your Status.
Screening for TB and Testing for HIV keeps you healthy and powerful.
EVERY SAFE AND HEALTHY STEP BRINGS YOU HOME.

KNOW YOUR STATUS

MASQVISE Health Program | Khumbul’ekhaya | mining matters | MINERALS COUNCIL SOUTH AFRICA



Take Care of Your Health.
Body, mind, and heart. Every step counts.
EVERY SAFE AND HEALTHY STEP BRINGS YOU HOME.

TAKE CARE OF YOUR HEALTH

MASQVISE Health Program | Khumbul’ekhaya | mining matters | MINERALS COUNCIL SOUTH AFRICA

SAIOH news

The Southern African Institute for Occupational Hygiene (SAIOH) remains steadfast in its dedication to its members and the ongoing advancement of the occupational hygiene profession. In pursuit of this commitment, we regularly provide updates and share key developments with our community. SAIOH flourishes through the active participation and ethical contributions of its members, whose engagement continues to shape the field. To further strengthen our collective efforts, we welcome and encourage feedback on the topics covered in this edition of the Journal.

SAIOH PRESIDENT'S ADDRESS

Karen du Preez: SAIOH President
e-mail: president@saioh.co.za



Karen du Preez, SAIOH President
Photograph: courtesy of SAIOH

Occupational hygiene in South Africa: from compliance to accountability

South Africa has sharpened its focus on occupational hygiene, embracing a rigorous framework to identify, assess, and control workplace hazards that impacted worker health. At the heart of this initiative lay a structured process, anchored by occupational hygiene surveys, risk assessments, and ongoing monitoring, designed to uncover hazardous conditions and guide corrective action.

SAIOH's Annual Scientific Conference 2025 keynote speakers revealed that the hygiene journey was not just technical – it was legal, strategic, and deeply human. Mr George Khan's keynote address reframed the legal landscape, challenging the myth of employer and hygienist immunity. South African law, long shaped by outdated frameworks, evolved toward strict liability and reverse onus provisions. Occupational hygienists were no longer shielded by proximity to employers; they were accountable to workers, communities, and the law. This shift underscored the importance of competent, certified professionals such as Approved Inspection Authorities (AIAs), whose roles in conducting surveys and verifying controls became more critical than ever.

Dr Vanessa Govender urged hygienists to look beyond measurement, to prevention. Her work on occupational lung diseases (OLDs) in the mining sector revealed that, while all OLDs are preventable, not all are curable. Prevention is, therefore, the highest duty. Her keynote address emphasised the power of high-fidelity data and artificial intelligence- (AI)- driven surveillance models that link exposure, medical outcomes, and workforce records – tools that elevate hygiene to strategic leadership conversations.

Ms Constance Titi Kekana built on this theme, showcasing how real-time monitoring and intelligent control systems have reshaped exposure management. From predictive analytics to ventilation on demand, these innovations support both regulatory compliance and proactive risk reduction. However, gaps remain in technology integration, regulatory readiness, and future skillsets, calling for accelerated progress to achieve zero harm.

Millysind Ebygale Ruiters introduced the newly launched Occupational Health and Safety Strategy of the National Department of Employment and Labour (DEL), aligned with the International Labour Organization's global framework. With its three pillars, viz. strengthening occupational health and safety systems, enhancing coordination, and improving workplace management, the strategy reinforces the occupational hygiene process as a national priority. Its five strategic result areas and commitment to monitoring and evaluation mirror the hygiene framework's emphasis on continuous improvement.

Prof. Stefan Linde reminded us that sampling is not a "one size fits all" process. Whether assessing chemical, noise, skin, or biological exposures, the strategy needs to match the investigation's purpose. His keynote echoed the hygiene framework's call for precision, highlighting how sampling methods, timing, and analysis need to be tailored to yield meaningful, actionable results.

Together, these insights affirmed that occupational hygiene is more than a regulatory obligation; it is an initiative-taking, multi-disciplinary strategy to protect health, ensure accountability, and embed resilience. By integrating legal clarity, data intelligence, and structured processes, South African employers and professionals build safer and smarter workplaces for all.

NATIONAL COUNCIL FEEDBACK

Karen du Preez: SAIOH President
e-mail: president@saioh.co.za

Deon Jansen van Vuuren: SAIOH General Manager
e-mail: deon.jvvuuren@gmail.com

Governance meetings:

- The SAIOH Management Board convened, online, on 6 November 2025, followed by two special board meetings on 11 and 19 November 2025.
- The annual SAIOH Council meeting took place in a hybrid format on 21 October 2025, during the SAIOH 2025 Conference in Umhlanga.

Key engagements and activities:

- The DEL formally appointed SAIOH's representative to the Noise Technical Committee, in relation to the forthcoming Noise Exposure Regulations (NER).
- In collaboration with Nelson Mandela University, the DEL hosted an in-person workshop on the NER and Physical Agents Regulations (PAR) in Gqeberha on 17 November 2025.



- Several SAIOH management members attended the Occupational Hygiene Approved Inspection Authority Association (OH AIA Assoc.) meeting on 21 November 2025.
- On 18 November 2025, SAIOH President, Karen du Preez, delivered an online presentation to Environmental Health students at Tshwane University of Technology (TUT), introducing them to SAIOH and its role in the profession of occupational hygiene.
- The SAIOH administration team held two internal online staff meetings on 13 October and 19 November 2025.

SAIOH Strategic Plan

SAIOH's five-year strategic plan (2023–2027), led by Jaco Pieterse, continues to guide institutional priorities and is reviewed regularly at Management Board and Council meetings.

SAIOH also participated in the Department of Health's Occupational Health and Safety Operational Planning workshop, on 29 and 30 July 2025 at OR Tambo International Airport, represented by Claudina Nogueira.

Ethics

SAIOH is pleased to share an update on the development of its new ethics course, created in partnership with North-West University (NWU). This initiative forms part of our ongoing commitment to uphold and advance ethical standards within the occupational hygiene profession. The course content has been fully developed and is currently undergoing final quality assurance checks to ensure that it meets SAIOH's rigorous standards for accuracy, relevance, and completeness. The official launch is anticipated for mid-2026. Members will be kept informed as we approach the release date.

In the interim, members whose ethics certification is due for renewal in early 2026 may continue to access the 2024 SAIOH Ethics webinar, presented by Terry McDonald. The presentation remains highly relevant and aligned with current professional ethics frameworks. Please note that the accompanying quiz has been updated to reflect the latest standards and expectations. This dual-track approach ensures that all members have access to credible, up-to-date ethics training, whether renewing certification or preparing for the new course rollout.

SAIOH branch activities: September–November 2025

SAIOH branches across the country have remained active and engaged through a variety of meetings, training initiatives, and conference contributions.

- **Western Cape Branch:** an in-person branch meeting and social activity was held on 21 November 2025, offering members an opportunity to reconnect and discuss regional developments.
- **KwaZulu-Natal Branch:** the KZN branch committee played a pivotal role in supporting the hosting and logistics of the SAIOH 2025 Conference, from 20 to 24 October 2025 in Umhlanga.
- **Gauteng Branch:** the Gauteng branch held its third meeting of the year, online, on 12 September 2025, continuing its commitment to accessible member engagement.
- **North-West Branch:** in collaboration with the NWU Occupational Hygiene and Health Research Initiative (OHHRI), the North-West branch hosted a successful one-day training course on 15 October 2025. The course, titled 'Application of ISO 23875 in Operator Cab Filtration, Pressurization, and Certification', was presented by Jeff Moredock of the International Society of Environmental Enclosure Engineers (ISEEE) at NWU. Mr Moredock also contributed to the SAIOH 2025 Conference

by presenting a four-hour hybrid professional development course (PDC 03) on 21 October, followed by an in-person full-day course (PDC 07) on 24 October.

- **Eastern Cape Branch formation:** efforts to establish an Eastern Cape branch are underway, led by Council Branch Coordinator, Ms Lizette Greeff, and Dr Shaun Ramroop of Nelson Mandela University in Gqeberha.
- **Inactive branches:** the Central (Free State), Northern Cape, and Mpumalanga Branches, and the Zululand Discussion Group remain inactive.

SAIOH 2025 Annual Scientific Conference

The 2025 SAIOH Annual Scientific Conference, hosted in KwaZulu-Natal, was a resounding success, bringing together professionals, thought leaders, and stakeholders from across the occupational hygiene spectrum. Held in a hybrid format at the Coastlands Hotel and Conference Centre in Umhlanga, the event showcased SAIOH's commitment to excellence, innovation, and inclusivity. With a robust programme of keynote addresses, professional development courses, technical sessions, and strategic engagements, the conference advanced best practices and reaffirmed occupational hygiene as a cornerstone of worker health and national resilience. Eight hundred and eleven delegates attended this five-day conference.

SAIOH 2026 Annual Scientific Conference

Development is underway for the SAIOH 2026 Conference, in collaboration with the National Institute for Occupational Health (NIOH). Initial planning meetings have been held with the NIOH Executive Director, Dr Spo Kgalamono.

International Occupational Hygiene Association Board, National Accreditation Recognition Committee, and Occupational Hygiene Training Association feedback

SAIOH remains actively engaged with international partners and initiatives, reinforcing its commitment to global best practices and professional development.

OHTA and IOHA newsletters

The Occupational Hygiene Training Association (OHTA) and the International Occupational Hygiene Association (IOHA) continue to publish regular newsletters. These are shared with all SAIOH members via e-mail and are also available on the SAIOH website: www.saioh.co.za. Members are encouraged to visit the OHTA website, www.ohtatraining.org, for additional resources.

New IOHA President

SAIOH congratulates Mr Matthew Olota, originally from Nigeria and now based in Canada, on his appointment as IOHA President. He is the third African to hold this prestigious position – an inspiring milestone for the continent.

Member achievement: Mark Harrison

We are delighted to recognise the achievement of Mr Mark Harrison of Occupational Hygiene Monitoring Services (OHMS), who has successfully completed the British Occupational Hygiene Society (BOHS) written projects. Mark is now eligible for the final oral assessment and the awarding of the BOHS Diploma in Professional Occupational Hygiene Competency. This internationally respected qualification is acknowledged by the SAIOH Professional Certification Committee (PCC) as meeting the requirements for assessment at the registered occupational hygienist (ROH) level. Mark previously attained technologist

status by completing all six OHTA modules and earning the OHTA ICertOH certificate. Congratulations, Mark, on this outstanding accomplishment!

Representation on IOHA

Corlia Peens continues to represent SAIOH on the IOHA Board and the National Accreditation Recognition (NAR) Committee, providing regular feedback to the Executive Committee (ExCo) of the PCC. IOHA now comprises 53 member associations, globally.

SAIOH Technical Committee feedback

SAIOH's Technical Committee continues to advance key research and guidance initiatives aimed at strengthening occupational hygiene practice and regulatory alignment.

- **Welding fumes research and position paper:** Led by Dr Ivan Niranjana and Technical Portfolio Coordinator, Dr Goitsemang Keretsetse, the Committee has completed a comprehensive position paper on the measurement and analysis of welding fumes. Developed in collaboration with the OH AIA Assoc., after a final review the paper was circulated to SAIOH members and the DEL, and published on the SAIOH website.
- **Heat stress management:** A second technical initiative is underway to develop procedures and a SAIOH position paper on heat stress management. SAIOH is working with the Council for Scientific and Industrial Research (CSIR) and Dr Johan Kielblock to support the research. The dual focus remains: to produce a robust technical paper and to inform SAIOH's recommendations for strengthening the PAR.
- **Real-time monitoring:** Prof. Stefan Linde (NWU) has taken the lead in developing a position paper on real-time monitoring in occupational hygiene. This work is ongoing and will contribute to future technical guidance.
- **Ergonomic risk assessment:** Under the leadership of Naadiya Mundy, a new sub-committee has been formed to develop procedures and/or guidelines to support SAIOH occupational hygiene professionals in conducting ergonomic risk assessments. Initial meetings have taken place, marking a promising start to this important initiative.

New SAIOH website and Quality Management System

The SAIOH Administration Team is actively working on populating the new SAIOH website, ensuring that it is a comprehensive resource for members. We look forward to launching the new website soon and delivering an improved and streamlined platform for the SAIOH community. Chapter 2 of the PCC's Quality Management System (QMS), which outlines the PCC assessment rules and procedures, is available on the SAIOH website, and offers essential guidance and supporting documentation.

SAIOH communications and editorial engagement: November 2025 update

SAIOH continues to maintain a strong editorial presence and pro-active member engagement through multiple platforms and initiatives.

SAIOH representatives attended the hybrid *Occupational Health Southern Africa* Editorial Board meeting on 20 November 2025. These engagements ensure that SAIOH's voice remains active in shaping regional occupational health discourse.

SAIOH publishes its newsletter and President's Page in two electronic media formats:

- *Occupational Health Southern Africa* journal
- *African Occupational Safety and Health (A-OS&H)* magazine

These publications are released every two-to-three months, with the most recent editions published in September and August 2025, respectively. All issues are distributed to members via Mailchimp and posted on the SAIOH website. SAIOH's latest submissions to the A-OS&H magazine and *Occupational Health Southern Africa* were completed in October and November 2025, respectively.

Global newsletters

The November 2025 edition of the *OHTA Global Link* and the September 2025 issue of the *IOHA Global Exposure Manager* were shared with members via Mailchimp and uploaded to the SAIOH website.

Member communications

SAIOH maintains daily engagement with its members through direct e-mail notifications, phone calls, and virtual meetings. These communications provide timely updates on:

- Legislative changes and new standards
- Industry news and technical developments
- Professional opportunities in occupational hygiene
- Products, services, courses, and webinars related to occupational hygiene, occupational health, and environmental safety

Recent events and announcements

SAIOH sent targeted communications promoting key events and learning opportunities, including:

- **NWU Workshop (Potchefstroom):** *Support for Occupational Hygiene Practitioners' Knowledge and Experience of the Skin as an Exposure Route* – an in-person workshop linked to an NWU research project.
- **CSIR & MHSC Stakeholder Workshop (3 October 2025):** a hybrid event on *The Impact of Overexertion on Women's Health and Safety in the Mining Industry*, hosted at the CSIR Convention Centre.
- **ESSA Annual Conference (15–16 October 2025):** hosted by the Ergonomics Society of South Africa (ESSA), this event highlighted key developments in ergonomics and workplace design.
- **SASOM Annual Conference (15 November 2025):** a hybrid event on tackling artificial intelligence (AI), informal work, and the future of occupational health and medicine in Africa, held at the Protea Hotel Fire & Ice! in Pretoria.
- **Safety-First PPE Conference (10–11 March 2026):** rescheduled to take place at Emperors Palace, Johannesburg. SAIOH has been invited to present a paper, with Karen du Preez, Cas Badenhorst, and Jeanneth Manganyi confirmed as speakers.
- **ICOH 2026 History Conference (15–17 April 2026):** SAIOH continues to promote the 8th International Congress on the History of Occupational and Environmental Health, in Leuven, Belgium.

PROFESSIONAL CERTIFICATION COMMITTEE

Lee Doolan: SAIOH PCC Administrator

e-mail: lee@saioh.co.za

Deon Jansen van Vuuren: SAIOH General Manager

e-mail: deon.jvvuuren@gmail.com

Ivan Niranjana: SAIOH PCC Chairperson

e-mail: ivann@dut.ac.za

The PCC ExCo held its fourth meeting of the year online on 26 September 2025. This was followed by a virtual full PCC meeting on 7 November 2025. Oral assessments were conducted online between 3 and 21 October 2025; the final written assessments took place on 3 October 2025.

Governance and quality assurance updates

Following several rounds of review, the SAIOH QMS Chapter 2: *PCC Assessment Rules and Procedures* was formally approved by the PCC ExCo and is available on the SAIOH website.

Reaching an additional milestone, the South African Qualifications Authority (SAQA) has updated the SAIOH requirements on its website (<https://pbdesig.saqa.org.za/viewProfessionalBody.php?id=844>) to reflect the PCC’s current standards.

Assessment development and training

- The PCC sub-committee tasked with developing the Occupational Hygiene Skill Set for the Self-Assessment and Gap Analysis (SA-GA) Tool has made significant progress. The document is undergoing final checks before submission to the PCC ExCo.
- The team is also developing oral assessment scenarios and refining the PCC Oral Assessment Guidelines.
- Online training workshops for PCC assessors were held on 14 February and 30 May 2025 to support consistent application of the new tools and processes.
- A free hybrid PDC (PDC 04) was hosted at the SAIOH 2025 Conference on 21 October. The first hour introduced the SA-GA Tool to all SAIOH members, while the second session provided in-service training for PCC assessors on the new oral assessment system.

Written assessment challenges and solutions

Efforts to transition the written assessment to an MS Excel-based platform – intended to replace the current learning management system (LMS) and proposed Moodle system – have faced technical and security challenges. Due to concerns around AI integrity and paper leaks, the PCC ExCo resolved to revert to hard-copy assessments at venues, invigilated by at least two PCC assessors. All papers are now couriered to and from assessment centres, coordinated by the PCC Administration Team.

Oral assessments

Oral assessments continue to be conducted online via Zoom or Microsoft Teams, with recordings retained for verification and quality assurance. In-person assessments remain an option, where preferred.

CPD management and compliance

- Registered SAIOH members can now upload continuing professional development (CPD) activities throughout the year via their MySAIOH profiles.
- Effective 1 February 2025, all CPD returns are audited before certificates are issued. Compliance includes proof of claims, payment of annual fees, and a valid Ethics Certificate.
- CPD points are now calculated annually, replacing the previous five-year rolling cycle. Minimum annual requirements are:
 - ROH: 12 points
 - ROHT: 10 points
 - ROHA: 9 points
 - Retirees/fellows: 4 points
- Requests for amnesty or extensions must be submitted in writing, with a strong motivation, to the PCC ExCo via the PCC Administrator (Lee@saioh.co.za).

Sector updates and noteworthy developments

- The South African National Accreditation System (SANAS) has confirmed that 56 OH AIAs are now accredited.
- The DEL’s new occupational hygiene report formats came into effect on 30 June 2025 and are strictly enforced during assessments.
- SANAS has commenced assessments and competency declarations aligned with the new NER.

Certification assessments

A summary of results for the assessments that took place from February to October 2025 is provided in Table 1. The PCC assessment dates for 2026 are in Table 2.

Occupational Hygiene Skills Forum

The SAIOH Occupational Hygiene Skills Forum (OHSF) continues to play a pivotal role in strengthening the quality and recognition of occupational hygiene training across South Africa, and beyond.

In 2025, the OHSF actively participated in the OHTA Approved Training Provider Forum meetings, contributing to global dialogue on training standards and quality assurance. The Forum’s fourth meeting for the year took place on 25 November 2025.

Table 1. SAIOH PCC certification assessment results as of October 2025

Certification category	Written assessments				Oral assessments			
	Assessed	Passed	Failed	Pass rate	Assessed	Passed	Failed	Pass rate
	n	n	n	%	n	n	n	%
OH assistant	105	95	10	90.5	0	-	-	-
OH technologist	59	48	11	81.4	47	28	19	59.6
Occupational hygienist	44	14	30	31.8	21	13	8	61.9
Total	208	157	51	75.5	68	41	27	60.3

Table 2. SAIOH PCC written and oral assessment dates and deadlines, 2026

Assessment type	Deadline for applications and payments	Final deadline for all assessment payments	Assessment date
Written	9 January	6 February	27 February
Oral	-	-	27 March*
Written	24 April	15 May	12 June
Oral	-	-	10 July*
Written	7 August	28 August	9 October
Oral	-	-	13 November*

*Oral assessments begin on this date and will be conducted over a two-week period

A core function of the OHSF is to evaluate applications from tertiary institutions seeking recognition for their occupational hygiene-related qualifications. The OHSF Chair has initiated contact with several institutions, including the University of Botswana, University of Pretoria (UP), Durban University of Technology (DUT), University of Johannesburg (UJ), Nelson Mandela University, and the University of Limpopo (UL), to encourage broader participation in the recognition process. Tertiary institutions offering occupational hygiene qualifications are invited to contact the PCC Administrator at lee@saioh.co.za for guidance on the application process. Once finalised, details of recognised training providers and qualifications will be published on the SAIOH website (www.saioh.co.za), providing students and certification candidates with a clear pathway to programmes aligned with SAIOH and international certification standards.

The OHSF was established to coordinate all aspects related to the recognition of occupational hygiene training materials (such as asbestos training), training providers, and institutions. It also supports the development and management of assessment and examination systems, where required.

Looking ahead, the OHSF has resolved to develop a SAIOH-specific Occupational Hygiene Legislation course. This inhouse course will form part of the certification requirements for non-AIA members. Development is scheduled to commence in 2026.

Dr Hennie van der Westhuizen has once again been invited to assist the OHSF in developing CPD-linked questions based on articles published in *Occupational Health Southern Africa*. This initiative aims to promote deeper engagement with the journal and assist members to earn CPD points. We sincerely thank Dr van der Westhuizen for taking this on. [👉](#)



Poster presenters at the SAIOH Annual Conference 2025. Back, L to R: Mosima Letsoalo, Kevin Renton, Jarryd Swanepoel, Lize van der Westhuizen. Front, L to R: Kutlo Tsiako, Dr Shaun Ramroop, Dr Goitsemang Keretsetse, Dr Jeanneth Manganyi, Vuyo Tsotsotso

Photograph: Deon Jansen van Vuuren (SAIOH GM)



Prof. Stefan Linde (NWU) receiving a gift from Dr Goitsemang Keretsetse (Wits School of Public Health) for delivering a keynote presentation at the SAIOH Annual Conference 2025, titled 'Occupational Hygiene in practice: the importance of matching your sampling strategy to the purpose of your investigation'

Photograph: Deon Jansen van Vuuren (SAIOH GM)



Karen du Preez (SAIOH President, NIOH) presents a gift to Dr Goitsemang Keretsetse (Wits School of Public Health) for the best poster presentation at the SAIOH Annual Conference 2025, titled 'Quantitative self-assessment of exposure to solvents among formal and informal nail technicians in Johannesburg, South Africa'

Photograph: Deon Jansen van Vuuren (SAIOH GM)

Getting to zero occupational lung diseases and tuberculosis infections in the South African mining industry

Nothando Moyo: Deputy Head of Health, Minerals Council South Africa, Johannesburg, South Africa
e-mail: nmoyo@mineralscouncil.org.za

ABSTRACT

Occupational lung diseases (OLDs) remain a significant public health challenge in the South African mining industry (SAMI), despite notable progress in disease reduction and dust control. This article reviews the current landscape, challenges, and best practices in OLD management, with a focus on tuberculosis (TB), silicosis, and coal workers' pneumoconiosis. It highlights recent data trends, evaluates the effectiveness of interventions, and proposes a roadmap for achieving zero OLDs in the mining sector.

INTRODUCTION

The mining industry is integral to South Africa's economic development, providing employment to hundreds of thousands of workers and contributing significantly to the nation's GDP. However, this economic progress comes with a substantial public health cost as the sector is associated with a high burden of occupational diseases. Among the most prevalent are OLDs, including tuberculosis (TB), silicosis, and chronic obstructive pulmonary disease (COPD). These conditions not only impact the health and livelihoods of mineworkers, but also affect their families and the broader communities in which they live.

South African mines face unique and complex challenges in managing and preventing OLDs. Hazardous dust exposure remains pervasive, with respirable crystalline silica (RCS) and coal dust representing key risk factors for the development of pulmonary diseases. The high prevalence of human immunodeficiency virus (HIV) exacerbates vulnerabilities, particularly in relation to TB, where coinfection rates remain alarmingly high. Additionally, the mining workforce is highly mobile, with workers often migrating between regions and countries, which makes ongoing health surveillance and consistent disease management more difficult.

Despite these challenges, the imperative to achieve zero OLDs in the mining sector is clear. It is an ethical responsibility to protect workers from preventable illnesses and premature death, as well as a critical public health objective that contributes to the broader wellbeing of society. Achieving this goal will require sustained commitment, innovative interventions, and collaboration among industry stakeholders, government, and labour. This article explores the current status of OLDs in the SAMI, reviews progress and persistent gaps, and sets out a roadmap for eliminating these diseases in the pursuit of a safer and healthier future for all mineworkers.

THE BURDEN OF OCCUPATIONAL LUNG DISEASES

TB: the burning platform

Tuberculosis remains the leading cause of death from a single infectious agent, worldwide, accounting for 1.25 million deaths in 2023, including 161 000 among individuals living with HIV.¹ Within the mining sector, TB is exacerbated by exposure to silica dust and elevated HIV rates, rendering miners particularly vulnerable. Disease management and control are further complicated by the prevalence of multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB).

Trends in disease reduction

From 2008 to 2024, the mining industry achieved substantial reductions in the incidence of OLDs.² Total occupational diseases decreased by 82%, pulmonary TB (PTB) by 84%, silicosis by 87%, and other lung diseases by 85%. Despite these successes, TB incidence in the gold sector remains high, with 420 cases per 100 000 individuals recorded in 2024, a rate comparable to the national average.

DUST CONTROL AND MILESTONES

Silica and coal dust

Efforts to minimise RCS and coal dust exposure have produced mixed outcomes. The gold and coal sectors have not consistently achieved the milestone targets established for dust concentrations in 2014 and 2024, emphasising the ongoing need for more robust dust suppression and monitoring strategies.

CHALLENGES AND OPPORTUNITIES

Disease management in mines

Key challenges in disease management include cross-border health issues, stemming from migrant labour, late reporting, medication stockouts for TB treatment, elevated rates of drug-resistant TB, and the presence of stigma and psychosocial barriers to care. Opportunities for improvement exist in the form of enhanced dust control measures, integrated TB/HIV programmes, improved screening processes (including for ex-miners), and comprehensive contact tracing.

Ex-miners and community outreach

Ex-miners continue to face significant risks and obstacles to accessing care. Best practice approaches include regular health screenings such as chest X-rays and spirometry, access to specialised occupational health clinics, legal support for compensation claims, pulmonary rehabilitation, psychosocial support, and strengthened community-based outreach and disease registries.

BEST PRACTICES AND INTERVENTIONS

Tripartite and industry initiatives

Collaborations among the Mine Health and Safety Council, the Minerals Council South Africa, government departments such as the Department of Mineral and Petroleum Resources (DMPR), the Department of Health (DoH), and other stakeholders have been instrumental in the progress that has been made. Initiatives include advancements in occupational hygiene and medicine, such as computer-aided diagnosis, the elimination of TB and HIV, research, and the establishment of new milestone targets for 2024, as well as integrated wellness programmes and monitoring tools.


KEY RECOMMENDATIONS

- Preventive practices: focus on addressing social determinants of health, including improving living conditions and nutrition.
- Infection and dust control: enforce the use of personal protective equipment (PPE), implement regular health screenings, and upgrade ventilation systems.
- Early detection and treatment: employ advanced diagnostic methods and ensure prompt initiation of treatment.
- Community engagement: educate and involve mineworkers and their families to reduce stigma and encourage treatment adherence.
- Cross-border health strategies: develop referral systems for migrant workers to improve continuity of care.
- Integrated wellness programmes: manage TB, HIV, silicosis, and other respiratory diseases through holistic approaches.
- Monitoring and evaluation: use data-driven methods to track health outcomes and inform policy decisions.

CONCLUSION

The SAMI has made notable progress in reducing OLDs. Nevertheless, persistent challenges require renewed commitment and innovative solutions. Achieving zero OLDs will depend on the acceleration of dust control efforts, strengthened collaboration between public and private sectors, integrated and person-centred care for current and former mineworkers, and robust systems for monitoring, evaluation, and policy alignment. The elimination of OLDs is attainable if all stakeholders unite to fast-track interventions and close the gap between mining operations and primary healthcare.

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2. Mine Health and Safety Inspectorate Annual Reports. Pretoria: Department of Mineral Resources and Energy. Available from: <https://www.dmre.gov.za/mineral-resources/mine-health-and-safety/resource-center> (accessed 5 December 2025). 

UPCOMING EVENTS

SOUTH AFRICA

NIOH: GHS Safety Data Sheets and Chemical Labels Webinar
Virtual

24-25 February 2026

Register: <https://redcap.nioh.ac.za/redcap/surveys/?s=R7M7P9AHAHHR89NW>

e-mail: toxicology@nioh.ac.za

INTERNATIONAL

ICOH History Conference 2026

Leuven, Belgium

15-17 April 2026

Website: <https://laislanetwork.org/events/icoh-history-2026/>

e-mail: info@icohhistory2026.org

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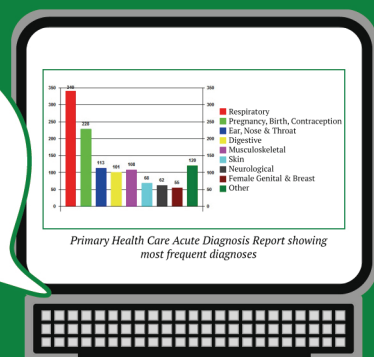
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Securex Cape Town debut event drives safety and security solutions forward

From 21 to 23 October 2025, the Cape Town International Convention Centre (CTICC) became the hub of the Western Cape's safety and security conversation as the first-ever A-OSH EXPO Cape Town opened its doors. Co-located with Securex, Facilities Management Expo, and Fireexpo, the event created a vibrant platform where professionals discovered, compared, and connected around the solutions needed for safer workplaces and communities.

"Securex Cape Town has proved that the Western Cape deserves a dedicated platform for safety and security. The energy on the show floor was exceptional, with exhibitors and visitors alike seeing the value of having this event in Cape Town. We welcomed over 2000 industry professionals to the event, a very promising start. This is only the beginning; we're looking forward to building on this success", says Mark Anderson, Portfolio Director at Montgomery Group Africa.

End-to-end offerings

Cape Town and the Western Cape face distinctive challenges, from the rising demand for estate security, to the operational strain at ports, to the impact of cyber threats on supply chains. Securex South Africa Cape Town brought together suppliers offering surveillance, intrusion detection, cloud-based access control, and integrated perimeter solutions to help organisations mitigate these risks. Demonstrations and discussions focused on practical implementation, ensuring visitors could picture how these tools might work in their own environments.

"With all four shows under one roof, attendees gained a complete view of how security integrates with occupational health and safety, fire protection, and facilities management, for example, how linking fire detection with access control creates greater resilience than siloed approaches", says Anderson.

This connected approach encouraged cross-sector conversations: estate managers considering occupational health and safety (OHS) implications, or logistics operators exploring how fire safety supports continuity planning. The holistic view of risk was one of the most valued aspects of the event.

"The engagement at the event was a winning feature, with estate managers, facilities operators, manufacturing leaders, and logistics professionals connecting face-to-face with solution providers, comparing technologies side by side, and discussing the long-term strategies needed to protect people and property", says Anderson.

Praise for Securex Cape Town

Exhibitors praised the opportunity to reach Cape-based decision-makers, while visitors highlighted the convenience of finding global and local suppliers in one hall. Together, this feedback reinforces the importance of Securex South Africa Cape Town in strengthening the regional security landscape.

"We recently revamped our website and, interestingly, our analytics show that 50% of the enquiries come from Cape Town. We therefore felt this was an opportune time to increase brand awareness in the



Visitors and exhibitors connect at Securex South Africa Cape Town, where the debut event showcased innovation, integration, and strong regional engagement Photograph: Montgomery Group Africa

region with a stand at Securex Cape. We are not only hoping to grow our franchisee base in the Western Cape, but by having a physical presence at the expo, we feel that we have a better chance of reaching potential customers who are swamped with the 'noise' on social media. The visitors we have spoken to are tech-savvy and keen to find out more about our solutions", says Lee Bester, Dealer Development Manager at Digit FMS.

"I've come all the way from Zambia specifically for this show, and I found it very interesting. I was exposed to the new technology on show, and I'm taking everything I've learned about back to Zambia to see how it will work for us. I was very impressed with the CCTV solutions", says Abel Musonda, CEO at Navari Fleet Management (Zambia).

"Securex Cape Town has not only extended the reach of Africa's leading security exhibition, but also confirmed the strong appetite for a dedicated regional platform. By balancing innovation with practical application, it has positioned itself as a must-attend annual highlight for the Western Cape's safety and security sector. Its success has underlined Cape Town's role as a hub of innovation and opportunity, proving that collaboration between exhibitors and visitors can deliver long-lasting impact. We encourage regular visits to the website – www.securex.co.za – to find out more about the next event, taking place in March 2027, alongside the Cape Town Industrial Technology Exhibition (CITE)", says Anderson. 