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Revolutionising The Avenues Project in Riyadh: Managing a mega project

Mental Health in the Workplace

Challenges of compliance management: A case study at the railroads

Corruption, compliance, and the informal sector

Is ergonomics a system? A case study: A meat inspector working in an abattoir

Artificial intelligence use (example) in OHS practice

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Editor's Comment

Celebrated as mental health awareness month, October serves as a crucial time to raise awareness and support for mental health issues. The journey towards mental health awareness and acceptance has undergone a transformative shift, paving the way towards open dialogue and progressive treatment.

Mental health awareness in the workplace is vital. A recent survey found that a staggering 15% of adults experience mental disorders. In the workplace this can result in decreased productivity and a loss of job satisfaction.

Many companies now recognising and understanding the stigma surrounding mental health, encourage their employees to openly share their stories and struggles. It is through this culture shift that ostracisation is becoming a thing of the past. The heartwrenching case of Elizabeth Packard brings to light the significant strides and momentum that mental health recognition has reached. In 1860, Packard an American woman was institutionalised by her husband Reverend Theophilus for insubordination and hysteria. At the time it was not uncommon for husbands to have their wives involuntarily committed to mental institutions without proof of mental illness. Women like Elizabeth who did not conform to social norms were seen as hysteric or insane. Locked in an insane asylum, Elizabeth was subjected to inhumane conditions, fought for her release and for the improved conditions of the other patients. After three years she escaped and courageously set about campaigning for women's rights and asylum reform. Her struggles for awareness sparked a revolution. Over 160 years after Packard's incarceration, mental illness awareness has been normalised with treatment options expanded. The articles in this issue focus on prevention, early intervention and self-care. Instead of ignoring symptoms of employee stress, employers are urged to entrench an environment of open communication. Mental wellness drives success, and for a company to thrive, employers must cultivate a culture of care.

In his article, Ehi Iden discusses the fast mutation in work pace, work processes, changes in employment patterns and modern technology which all contribute towards workplace stress. Competing with machines and robots for employment negatively impacts workers' mental health. To prevent a deterioration of the situation across Africa, OSHAfrica in partnership with AU-DA are in the process of drawing up a document titled "The African Occupational Safety and Health Act". Once completed it will be presented for further review and acceptance by the African Union leadership before adoption. We look forward to its release and the positive times ahead.

Harry Fourie in his article scrutinises non-compliance in the informal sector. Although South Africa's OSH legal framework is strong, the country faces significant challenges in enforcing compliance. Governmental disinterest, poor data collection systems, weak enforcement of regulations, and widespread non-compliance continue to undermine workplace safety across the nation. Additionally, the informal sector — including small food vendors, take-away outlets, and taverns — presents a unique set of challenges in ensuring health and safety not only in the workplace, but throughout communities as well. Businesses that trade without registration, evade inspections and pose significant public health risks, jeopardising consumer safety and resulting in the tragic and unnecessary loss of childhood lives.

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Revolutionising The Avenues Project in Riyadh:

Managing a mega project with over 13,500 workers

INTRODUCTION

To provide some context, the journey to join this project was demanding. I underwent two gruelling interviews, one lasting over an hour and a half, and another about 30 minutes, conducted by three HSE managers. It was the longest and most challenging interview process I had ever experienced.

After successfully passing, I was approached by Nesma and Partners and eventually accepted the contract to become the Project HSE Manager at The Avenues Riyadh Project in the Kingdom of Saudi Arabia.

PROJECT OVERVIEW

The Avenues Project in Riyadh was one of the largest projects in the Kingdom, covering a vast 1.8 million square meters — equivalent to 31.25 American football fields.

Once completed, The Avenues Riyadh would be the largest commercial mall in the Middle East, featuring luxury and lifestyle hotels, residential apartments, offices, and a parking lot for over 15,000 vehicles.

PROJECT DETAILS

The Avenues Mega Project in Riyadh, with a workforce exceeding 13,500 employees, operated 24/7 throughout the year.

The project, valued at around 1.8 billion USD (approximately 7 billion Saudi Riyals), faced numerous challenges, leading to tensions between the Client, PMC, and Nesma and Partners.

The scope of work was extensive, including bulk earthworks, civil works involving significant steel reinforcing, large concrete pours, precast columns, and massive lifts. The project was expected to peak at around 22,000 employees, with a duration of 40 months.



Fabian Buckley
Idip Nebosh

MY ARRIVAL ON SITE

I arrived on November 14, 2023, during a turbulent time. The project had been halted for about two days due to unresolved safety concerns. We were inundated with contractual letters related to HSE aspects, and several serious accidents occurred during this period.

When I arrived, the site had 31 tower cranes, numerous mobile cranes, and various other plant and machinery operating 24 hours a day. Fortunately, I found a capable individual managing this department efficiently, which gave me hope that I could harness the potential within our team.

I had the site HSE managers and supervisors conduct SWOT analyses on their teams to identify strengths.

We restructured the teams, placing individuals in roles where they could excel, which significantly improved our performance.

For me, leadership means tapping into the greatness within our people and driving them from the front lines to achieve results.

CHALLENGES

We encountered formidable obstacles that hindered efficiency and compromised health and safety. These included fragmented safety protocols, poor communication, language barriers, and inadequate subcontractor management.

TURNING THE PROJECT AROUND

However, through a strategic overhaul, concerted leadership efforts, and the meticulous implementation of innovative practices, we embarked on a journey to transform the project's safety culture.

During the first three weeks, which also served as the handover period, I was deeply involved in



day-to-day operations, as many aspects required hands-on senior management support. Faced with constant complaints and concerns from the PMC, CSC, and site management, I decided to put the project under intensive care.

I convened a joint workshop with my senior HSE team where we devised a strategy to get everything back on track. I held meetings with my two site HSE managers, and we agreed on process flows for each required activity. I followed the POLC management approach to implement these measures, starting with planning and staying ahead of the construction team.

We had numerous subcontractors performing a significant portion of the work. Unfortunately, due to the lack of a safety culture in many parts of Saudi Arabia, this led to various challenges, primarily stemming from the subcontractors. We agreed to take firm control of this issue, as most accidents were caused by them.

PIONEERING SOLUTIONS

1. Establishing a robust safety system

We initiated intensive training and support for personnel, coupled with regular audits to ensure adherence and effectiveness. Although I attempted to integrate advanced team software for seamless

management and monitoring, I could not implement this before my departure.

2. Breaking down silos

We promoted cross-departmental collaboration through shared goals and streamlined communication channels.

By implementing integrated project management systems, we fostered synergy and accountability, enforcing clear process flows to ensure cohesive operations across departments.

3. Enhancing meeting effectiveness

Regular senior management meetings were instituted to discuss planned activities and high-risk operations. We conducted detailed look-ahead planning sessions to ensure meticulous execution of tasks.

4. Revolutionising logistics management

Working closely with the logistics manager and his team, we held numerous meetings and gained valuable insights from the project director.

Recruiting experienced logistics personnel was crucial, and although we had dedicated team members, managing such a mega project required highly skilled and experienced individuals. We incorporated modern technology and simplified process flows for efficient logistics operations, which significantly helped turn things around.

5. Overhauling subcontractor management

We centralised subcontractor management, enforcing strict compliance with the help of our contracts department. Together, we developed strategies to keep subcontractors in check, using the contract's full authority when necessary.

Transparent communication channels were established, and regular HSE meetings were held with subcontractors. Although I planned to implement rigorous audits, I left before this could be realised.





A brilliant PMV SHES inspector brought innovative ideas to the department, managing it exceptionally well.

8. Fostering transparency in incident reporting

We cultivated a safety culture that encouraged open reporting without fear of reprisal. Transparent reporting systems were established through QR codes and Google forms, allowing people to report incidents and whistleblowing aspects anonymously. This led to a significant increase in near-miss reporting and other crucial aspects of the project.

9. Clarifying job descriptions

Detailed job descriptions were developed, and clear expectations were communicated for all project roles.

10. Cultivating ownership and accountability

Construction and project managers were held accountable for accidents and violations in their areas, promoting proactive measures to prevent recurrences.

My next objective was to develop a RACI matrix within the teams, but I did not have the opportunity to implement this before resigning.

11. Enhancing supervision and employee competency

Although not yet executed, I planned to conduct assessments to ensure personnel competence and provide comprehensive training programmes.

However, before I left, we managed to get our management to agree to employ skilled artisans, charge hands, and retired foremen to conduct on-the-job training and scheduled practical sessions working within our SHES department.

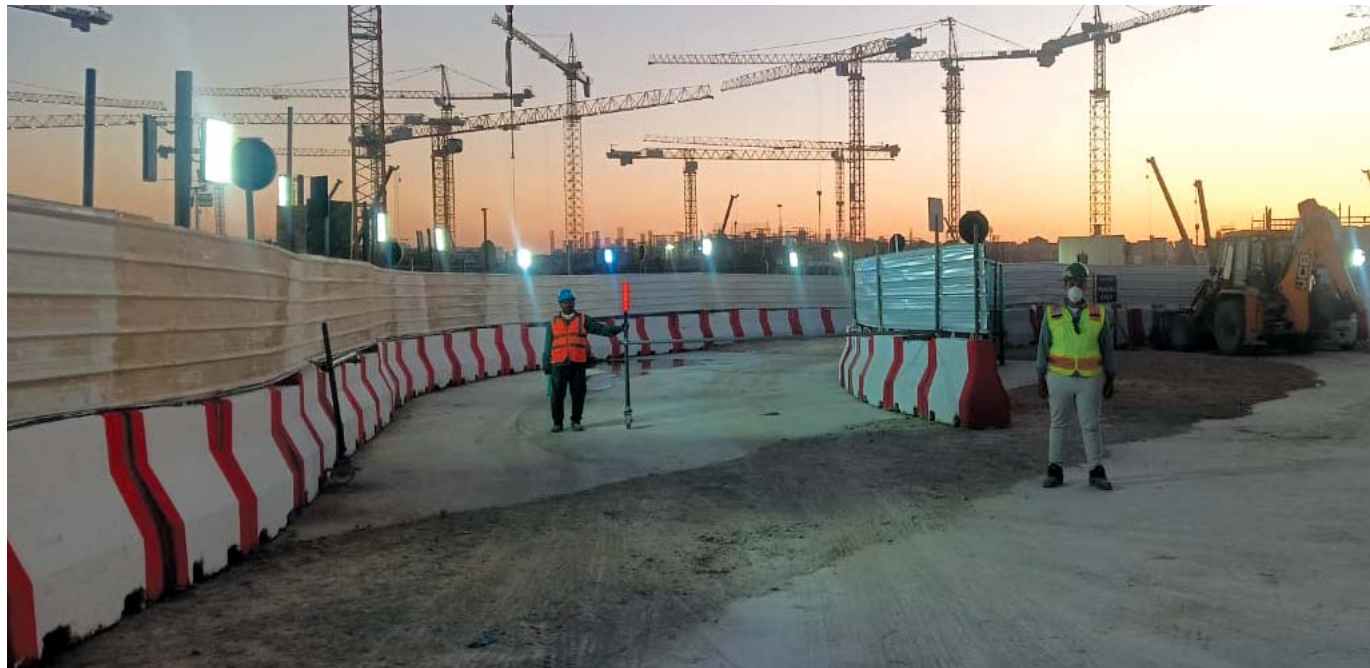
This initiative had a tremendous impact and was well-received by all.

6. Addressing language barriers

We provided language translation support and introduced innovative tools for effective communication. We also planned to employ more Bangladeshi safety personnel to bridge communication gaps, but this too was not fully realised before my departure.

7. Implementing effective tool and equipment management

We established a stringent system for inspecting and maintaining portable electrical tools, enforcing compliance through field inspections and subcontractor protocols.



12. Encouraging critical reflection

We encouraged introspection and questioning of existing processes to identify areas for improvement constantly and we rewarded great ideas and suggestions.

We fostered a culture of innovation and proactive problem-solving to drive continuous improvement.

In conclusion the revitalisation of The Avenues Project in Riyadh exemplified a proactive and holistic approach to overcoming challenges. By embracing innovation, fostering collaboration, and prioritising safety and quality, Nesma and Partners are poised to redefine success in mega-project management.

Through collective efforts and a commitment to excellence, the project aims not only to address current obstacles but also to set new standards for efficiency, safety, and quality in the construction industry.

The project was indeed challenging, but with great management and client personnel who supported us in various ways, it shall become a remarkable flagship project in KSA.

I cherished my time working with my dedicated team that gave their best despite the hardships we faced. I am confident that everyone involved will contribute to making this project a monumental success — one for the ages.





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SOUTHERN AFRICA
(FPASA)**

ABOUT US

The Fire College is a professional training centre dedicated to assist in the reduction of life & property losses in the Southern Africa region.

The Technical division includes the Library which offer a range of fire safety management consulting services to members and clients.

BACKGROUND

The Fire Protection Association of Southern Africa (FPASA) was established in 1973 to provide a specialized fire safety management technical and training service to industry, commerce, fire and rescue services and society at large.

Over the years the Association has developed a range of services that are recognised for their quality, professionalism and value:

Fire Safety Education
Technical Services
Membership Options

OUR VISION

To promote a responsible attitude towards fire protection, fire safety and fire prevention, in Southern Africa.

MISSION

To provide professional education, training, technical services and membership support to the Association and the community at large.

TRAINING

The Fire College is a professional training centre dedicated to assist in the reduction of life and property losses in the Southern African region. It provides training on request to its members and non-members alike and in addition provides standard training programmes to suit the broad spectrum of industrial and commercial requirements.

Visit our website for our training prospectus.

MEMBERSHIP

Membership categories include Individual & Corporate, as well as the special category of Stakeholder Members for contributing insurers. Visit our website for more info on membership benefits.

TECHNICAL SERVICES

The Associations Technical Department provides a fire safety consulting service throughout the Southern African region.

Utilizing a team of qualified professionals, with national and international fire safety management consulting experience, we are ideally positioned to offer a value adding, cost effective consulting service that will help members meet their fire safety obligations with confidence.

Supported by our extensive technical library, that provides access to local and international standards, codes and best practice, we are able to offer fire safety consulting to all business sectors including commerce, industry, healthcare, institutions and surface mining. Due to our involvement in legal compliance reviews, and to avoid a conflict of interest, we do not prepare rational designs in terms of the National Building Regulations.

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Corruption, compliance, and the informal sector: Rethinking South Africa's OHS strategy



Herman (Harry) Fourie has a passion for occupational health and safety and has been working in the industry for many years. He is Vice-Chairman of the Safety First Association.

Occupational health and safety (OHS) is a critical concern in South Africa, but despite a strong legal framework, the country faces significant challenges in enforcing OHS standards.

Issues such as governmental disinterest, poor data collection systems, weak enforcement of regulations, and widespread non-compliance continue to undermine workplace safety across the nation.

These challenges are further compounded by the prevalence of informal businesses, which operate outside the regulatory framework and are often overlooked in official statistics and enforcement measures.

Recently, the Department of Employment and Labour announced plans to increase the number of OHS inspectors, signalling an effort to address these systemic issues. However, this move alone may not be enough to remedy the deep-rooted problems within the country's OHS landscape, especially given that between 50% and 70% of businesses are non-compliant with health and safety standards.

Additionally, the informal sector — including small food vendors, take-away outlets, and taverns — presents a unique set of challenges in ensuring safe and healthy working conditions.

These businesses often operate without registration and are not subject to inspections, making them significant contributors to OHS and public health risks.

GOVERNMENT EFFORTS TO INCREASE OHS INSPECTORS: WILL IT MAKE A DIFFERENCE?

The Department of Employment and Labour's decision to increase the number of OHS inspectors reflects an acknowledgement of the strain on its current resources.

With only around 1,000 inspectors responsible for monitoring over one million workplaces, the department's enforcement capacity has been severely limited.

The inspector-to-business ratio is alarmingly low, making it nearly impossible to ensure compliance across industries. The addition of new inspectors is intended to ease the workload and improve oversight. But will this move truly make a difference in South Africa's current situation?

While more inspectors could help alleviate some of the burden on the existing workforce, several key issues remain unaddressed:

1. **Prevalence of non-compliance:** A staggering 50-70% of businesses in South Africa do not have proper health and safety measures in place

or are outright non-compliant with the OHS Act and related regulations. These businesses either lack the resources to implement effective safety programmes or do not view compliance as a priority.

Many small and medium-sized enterprises (SMEs) are especially vulnerable, as they often see OHS regulations as costly and burdensome. Even with more inspectors, the sheer volume of non-compliant businesses makes it difficult to enforce meaningful change.

2. **Weak enforcement and corruption:** South Africa's legal framework for OHS is robust, but enforcement remains weak. Many violators face minimal consequences, with fines often being too low to act as a serious deterrent.

Furthermore, corruption within governmental departments has significantly hampered the enforcement process. Inspectors are sometimes bribed, and companies with political or financial influence often escape penalties. Increasing the number of inspectors without addressing corruption risks merely expands opportunities for bribery and selective enforcement.

3. **Lack of corporate safety culture:** In many industries, particularly in the informal sector, there is a lack of a safety-first mindset. Many employers prioritise profit over safety, and compliance with OHS regulations is seen as a "tick-box" exercise rather than a fundamental part of business operations.

This attitude means that even with more inspections, compliance is likely to remain superficial unless there is a broader cultural shift within the corporate environment.

THE INFORMAL SECTOR: A BLIND SPOT IN OHS ENFORCEMENT

One of the most significant challenges to OHS enforcement in South Africa is the country's large informal economy. According to the South African Informal Economy Study conducted in 2021, around 2.5 million South Africans work in the informal sector, which contributes roughly 5-7% to the country's GDP. Informal businesses, including food vendors, take-away outlets, taverns, and small restaurants, often operate without registration, meaning they are not subject to the same OHS and health regulations as formal businesses.

LACK OF COMPLIANCE WITH THE OSH ACT

Informal businesses, by their very nature, are



outside the reach of many regulatory frameworks. These businesses are not required to register with the DEL, which means they do not have to comply with the Occupational Health and Safety Act (OHS Act) or its associated regulations.

As a result, workers in these businesses are at a higher risk of workplace injuries, illnesses, and unsafe conditions. Common issues include:

- **Lack of training and awareness:** Owners of informal businesses often lack the necessary training in occupational health and safety practices. Employees are frequently exposed to hazardous conditions without the proper protective equipment or protocols. For example, food vendors and small restaurants may not have adequate fire safety measures or sanitation standards, posing both health risks to workers and safety risks to customers.
- **Absence of worker protections:** Workers in the informal sector are typically not covered by employment contracts or labour protections, leaving them vulnerable to exploitation and unsafe working conditions. They are less likely to report safety violations for fear of losing their jobs, and there is little to no oversight from OHS authorities.

IMPACT OF NON-COMPLIANCE ON PUBLIC HEALTH

In addition to OHS concerns, many informal businesses in the food industry do not comply with public health regulations, such as the Health Act. This lack of compliance has serious implications for both workers and the public. Informal food vendors and take-away outlets often operate without adhering to basic hygiene standards, which increases the risk of foodborne illnesses.

- **Poor sanitation and food safety:** Many informal restaurants and taverns lack access to clean water, proper waste disposal, and adequate refrigeration. These conditions not only endanger workers but also pose health risks to customers. In some cases, expired or contaminated food is served, leading to outbreaks of foodborne diseases. Since these businesses are not formally registered, they often escape health inspections, further exacerbating the problem.
- **Limited accountability:** Because informal businesses are not registered, it is difficult for authorities to hold them accountable for health and safety violations. Even if customers or workers report issues, there is often no formal mechanism for enforcement. The result is a regulatory blind spot that puts both workers and the public at risk.

SOLUTIONS: A HOLISTIC APPROACH TO IMPROVING OHS AND PUBLIC HEALTH

While increasing the number of OHS inspectors is a positive step, it is clear that South Africa needs a more comprehensive approach to address the challenges of non-compliance, corruption, and the informal sector. Some potential solutions include:

1. **Targeted education and training programmes:** The government, in partnership with industry bodies, could roll out training programmes specifically designed for SMEs

and informal businesses. These programmes would focus on affordable and practical ways to implement basic OHS measures and comply with health regulations. Raising awareness about the long-term benefits of maintaining a safe and healthy workplace could help change attitudes toward compliance.

2. **Stronger penalties and anti-corruption measures:** To ensure that businesses take OHS seriously, penalties for non-compliance must be increased and consistently enforced. Additionally, corruption within the inspection process must be addressed. This could involve creating an independent oversight body to monitor the activities of OHS inspectors and ensure transparency in the enforcement process.
3. **Incentivising compliance:** Instead of relying solely on penalties, the government could incentivise businesses to comply with OHS regulations. For example, businesses that maintain high safety standards could be eligible for tax breaks, reduced insurance premiums, or public recognition. Such incentives could make compliance more appealing, particularly for smaller businesses.
4. **Formalising the informal sector:** One way to bring informal businesses into the regulatory framework is through formalisation. The government could simplify the registration process for small businesses and offer incentives for registering, such as access to funding, training, or tax benefits. Once registered, these businesses would be subject to OHS and health inspections, which would help improve safety standards and public health outcomes.
5. **Improving data collection systems:** A centralised, transparent system for tracking workplace injuries, incidents, and OHS violations is critical for understanding the scope of the problem and developing data-driven policies. By creating a national database, the government could monitor trends and allocate resources more effectively.

MOVING FORWARD

South Africa's occupational health and safety challenges are multifaceted and deeply ingrained. While the government's recent announcement to increase the number of OHS inspectors is a step in the right direction, it is unlikely to solve the problem. The high levels of non-compliance, corruption, and the existence of a vast informal sector create significant barriers to improving workplace safety and public health.

To truly make a difference, South Africa needs a holistic approach that addresses the underlying issues of weak enforcement, poor safety culture, and the lack of oversight in the informal economy. Through education, stronger penalties, incentives for compliance, and efforts to formalise informal businesses, the country can begin to make progress in ensuring safer and healthier workplaces for all.

Following is a general breakdown of compliance rates with the Occupational Health and Safety (OHS) Act in South Africa by industry, based on available reports and studies:

1. Mining industry

- **Compliance rate:** 80-90%
- **Challenges:** The mining sector in South Africa has strong OHS regulations due to the historically hazardous nature of the work. Regular inspections and strict penalties for non-compliance result in a relatively high compliance rate. However, smaller mining operations and informal miners sometimes lag behind in safety standards.
- **Common non-compliance issues:** Failure to provide adequate protective equipment, safety training gaps, and inadequate emergency preparedness.

2. Manufacturing industry

- **Compliance rate:** 70-80%
- **Challenges:** Large manufacturing operations, particularly those involved in chemicals, steel, and automotive industries, tend to invest in OHS compliance. However, compliance may drop among smaller manufacturers and in areas with poor safety culture.
- **Common non-compliance issues:** Poor machine guarding, inadequate employee training, and lack of risk assessments.

3. Construction industry

- **Compliance rate:** 50-65%
- **Challenges:** The construction industry has historically lower compliance rates due to the fragmented nature of the work, temporary sites, and the involvement of multiple subcontractors. The transient workforce and high-risk environments exacerbate the challenge of ensuring consistent compliance.
- **Common non-compliance issues:** Inadequate fall protection, insufficient personal protective equipment (PPE), failure to conduct safety audits, and unsafe scaffolding practices.

4. Agriculture sector

- **Compliance rate:** 30-50%
- **Challenges:** Agricultural operations, especially in rural and informal setups, often show the lowest compliance rates due to a lack of formal safety protocols, minimal inspections, and limited resources. Seasonal labour also contributes to difficulties in maintaining consistent OHS standards.
- **Common non-compliance issues:** Lack of protective equipment, inadequate safety training, poor handling of hazardous chemicals, machinery safety lapses.

5. Retail and hospitality sector

- **Compliance rate:** 60-70%
- **Challenges:** These sectors often face challenges in meeting OHS standards due to low awareness and prioritisation of health and safety, especially in small businesses. Larger, more established companies usually fare better in compliance.
- **Common non-compliance issues:** Poor ergonomics, manual handling injuries, lack of emergency planning, and non-compliance with fire safety regulations.

6. Transport and logistics industry

- **Compliance rate:** 65-75%
- **Challenges:** The logistics sector, particularly involving road transport, experiences moderate compliance levels. Larger companies often ensure compliance, but smaller operators may not adhere to safety standards as rigorously.
- **Common non-compliance issues:** Fatigue management, inadequate vehicle maintenance, unsafe loading and unloading practices, and lack of safety training for drivers.

7. Healthcare sector

- **Compliance rate:** 70-85%
- **Challenges:** Public and private healthcare institutions generally strive for high compliance with OHS standards due to the nature of their work environment. However, resource constraints, particularly in public facilities, may hinder consistent compliance.
- **Common non-compliance issues:** Exposure to hazardous biological agents, ergonomic issues, and failure to provide adequate PPE.

8. Small and medium enterprises (SMEs)

- **Compliance rate:** 30-50%
- **Challenges:** SMEs across various industries often struggle with compliance due to limited financial and human resources. They may lack dedicated health and safety personnel, lowering adherence to OHS regulations.
- **Common non-compliance issues:** Lack of safety training, improper documentation, insufficient risk assessments, failure to implement safety management systems.

9. Public sector (Government departments, municipalities)

- **Compliance rate:** 50-65%
- **Challenges:** Public sector entities may face moderate compliance rates, with larger organisations typically doing better than smaller departments and municipalities. Bureaucratic processes can sometimes hinder the prompt implementation of OHS measures.
- **Common non-compliance issues:** Ergonomics, fire safety issues, inadequate risk assessments, and workplace violence.

KEY FACTORS INFLUENCING COMPLIANCE

- **Size of the company:** Larger companies with formal OHS departments tend to have higher compliance rates compared to SMEs.
- **Sector-specific risks:** Industries with inherent risks, such as mining and manufacturing, tend to focus more on compliance due to the severe consequences of accidents.
- **Geographic location:** Compliance tends to be higher in urban and industrial areas where inspections are more frequent.
- **Availability of resources:** Companies with greater access to resources, such as funding for safety equipment and training, tend to have higher compliance rates.



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SAPEMA News

As we approach the last 7-odd weeks of this year it can clearly be stated that 2024 has gone like lightning speed! Here are a few of the highlights from this year's activities.

In June, we attended the A-OSH conference held at Gallagher Estate. We showcased all our members' logos on our branding so that the visitors could see who our members are, and ensure they are buying their PPE from our members.

AGM

SAPEMA held their AGM on the 17th of September. A number of pressing issues were tabled for discussion, as well as the kick off planning of our first ever PPE Conference. All present voted in favour of the existing Exco and Directors remaining.

- Directors: Deleane Luzzatto (Rebel Safety Gear), Mike Freemantle (Safeco), André Eloff
- Exco: Karl Rottcher (uvex)
- The Directors called for an additional four nominations for Exco members to be voted in, taking the total number of Exco seats to 8. This is to assist with balancing the load of portfolios and to ensure that these portfolios get the attention and momentum that they need.
- The four (4) Exco members voted in, are Grant Fraser (Claw Boots, JHB); Günther Verryne (Greenline Respiratory Protection, KZN); Wessel Oosthuizen (Karam Africa, JHB) and Geraint Beacham (Magnum and Hi-Tec Interceptor South Africa, CPT).
- Günther Verryne was nominated and accepted the vote in as SAPEMA Chairperson for 2025. Deleane Luzzatto agreed to co-opt with the newly elected Chairperson for guidance and support whilst he learns the ropes and comes to grip with his new role. It was unanimously agreed that Roxanne Cocci continue as the secretarial and administration service provider.

RESPIRATORY FORUM

On 15th October, SAPEMA held its first Respiratory Forum meeting, since COVID at uvex offices in Irene, PTA. It was well attended both physical and online with 22 attendees.

Important issues were discussed covering the latest standards EN143:2021 vs the previous EN143:2000; pushing SABS for a respiratory meeting, as there has not been one for a substantial amount of time. The Forum was advised that SABS had sent out various mails regarding the reaffirmation of standards that needed to be actioned by TC1194/09 members. However, it was also noted that many of the TC members have not been included in this communication and therefore cannot be of service in terms of responding.

The Forum also covered points from the NRCS Respiratory meeting which held earlier in October. The use of K95/N95 masks that are illegal to use in South Africa, are still very much in use which the NRCS confirmed. SAPEMA is requesting this document from NRCS, so that industry and end-users are educated about this. This is the reason SAPEMA has set up these Forums, to discuss and address these important issues.

With their respiratory expertise, Rani Naidoo (3M) was voted

in to continue to be the Respiratory Forum Leader with Gunther Verryne (Greenline) as second in lead. They will be at the fore front of getting this information and sharing with SAPEMA members.

EYE AND FACE TRAINING SESSION

SAPEMA will also be holding an Eye and Face Protection training session for members to attend. This is another aspect SAPEMA is trying to re-ignite for its members.

GOLF DAY

On the 16th of August we held our ever popular annual Golf Day at the Ebotse Golf Course. It was yet again a successful event for SAPEMA, with 18 four balls and 4 sponsored holes. We had some amazing and funky prizes sponsored by some of our members. SAIOSH sponsored our dinner. Our golf day continues to be popular as it gives our members a day of fun, and a time to catch up with colleagues, suppliers, customers and old friends from the industry. The floating trophy from last year's winners, SAIOSH, was handed over to the 2024 winners REBEL Safety Gear.



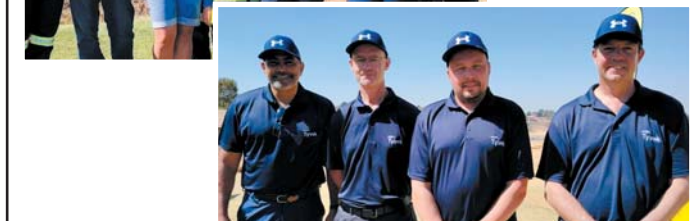
Left: Craig Mellors and Ryan de Boot, Rebel Safety Gear winners of the 2024 golf day



Below: Safeco boys, best dressed winners



Left: Clas Boots, sponsored hole



Below: DuPont, Four ball

The SAPEMA is looking forward to an exciting 2025 with its new Exco Members and new Chairperson.

SAPEMA Exco - 2024-2025

Günther Verreyne - Chairman



Günther started his career in 2003, studying engineering and working for Triangle Technical and Safety (TTS), which later became the Pienaar Bros Vereeniging branch. He advanced from driver to storeman, store manager, debtors clerk, creditors clerk, buying, sales representative and finally promoted to a branch manager in the Pretoria region. After spending a few years at Invicta Holdings Group for ManDirk, and the ABH group to manage their inland branches for North Safety Products Africa and Allied Mesh, he rejoined Pienaar Bros North, managing the Potchefstroom branch. He was appointed operations manager of the VMS division where he oversaw operations for contracts and championed the ARC division. He sharpened his skills in distributor to end user, managing VMS sites, franchises and branches through various regions in SA and abroad. Günther is now General Manager on the Exco-board at Greenline Respiratory Products to serve Original Equipment Manufacturer (OEM) channels. As an OEM, he has the additional understanding of NRCS, SABS, DTIC, import and exports.

"I am proud to be nominated as Chairman of SAPEMA and look forward to serving its members and the industry. I'm passionate about ensuring people are safe, and assisting the industry align their core values of safety comes first, human life and the quality of life is valuable above all else" says Günther.

Deleane Luzzatto



Deleane comes from a very technical pharmaceutical background where she worked for Glaxo Smithkline as Key Accounts Manager. In 2003 she decided to make a change and joined Nu-Tog a small company where she learnt the PPE industry. She was awarded the commodity contract to supply the Gautrain project with all their PPE. While there she absorbed as much as she could from all the OEMs of PPE from head to toe, supplying 33 sites, managing two induction centres, PPE onsite stores and reporting to the project management team about their PPE spend and usage. She then joined REBEL Safety Gear. In 2013 she was actively involved in getting the range of REBEL footwear SABS accredited.

Having always had a passion for the technical aspects of products with regards to standards and specifications, in 2011 she became an active and participating member of SAPEMA. Soon she was voted in as Inland Regional Chairman and then as National Chairman of the Association. Deleane has filled two terms as the National Chairman and hence has been the longest standing female Chairman of the Association. She is now a board member of the Association and still involved at Exco level.

"Passionate about people's safety and ensuring that they are equipped with the correct PPE to do their job without any injuries, has always been my priority" says Deleane.

Roxanne Cocci - Secretariate



Roxanne is the secretariat for SAPEMA. She started her career in the PPE industry in early 2007 assisting with the supply and delivery of PPE for the greater Gautrain project. She continued full time in the PPE industry until 2012, thereafter dabbling in and out of the industry until finding her way to SAPEMA in 2017. Roxanne has spent the previous 7 years as the SAPEMA Secretariate, I also form part of the SABS technical committees under TC1194.

"I look forward to the future with excitement and determination as SAPEMA makes even more impact in the PPE industry in terms of Compliance to Standards and Specifications" says Roxanne.

Mike Freemantle



Mike's involvement with PPE goes back to his days in the construction industry where safety policies and implementation played a vital role. In 1988 he created Safeco Safety to manufacture PPE products, a company he continues to own.

He has been a SAPEMA member since 1998 and an Exco member since 2001. His responsibilities with the association have included Technical Committees with SABS and SAPEMA Constitutional matters.

Mike's participation in SAPEMA Exco and Technical Committees started in 2001 and SABS PPE Standards Committees in 2002.

Grant Fraser



Grant has managed production for both men's and ladies' factories, including amphibious outdoor sandals. His areas of expertise include all forms of manufacturing methods, material selection, uppers and soles applications to name a few. He has also been involved in costing, work studies, ergonomics and quality control as well as planning, design and production control. Grant opened the first footwear factory in Lesotho where he trained raw personnel. He also opened factories in Pinetown where 13 million pairs of footwear have been manufactured over a 10-year period. He has extensive international experience in textile, coagulate, knitted, and non-woven substrate manufacturing.

After purchasing a gumboot machine Grant designed multi-purpose gumboot moulds. He then introduced dedicated CLAW footwear moulds; travelled to India and China visiting factories and raw material manufacturing facilities. He is now semi-retired and consults on local/international footwear and clothing sizing, fitment, manufacture, raw materials, and manufacturing techniques.

André Eloff



André has 34 years experience in the PPE industry. He is a participating member on all SABS Technical Committees (TCs) for PPE. He has been a member of SAPEMA since 2007.

Andre has several diplomas: Diploma in Management Practice - Henley Business School (UK); Mine Rescue Diploma - Colorado School of Mines (USA); Fundamentals of Finance and Accounting Diploma - American Management Association (USA); QSSP (Qualified Safety Sales Professional) Diploma (USA); an International Purchasing Management Diploma - Institute of Purchasing Management (RSA).

André is the Technical Sales Manager for Dromex.

Geraint Beecham



Geraint started his PPE journey in Emalahleni in 2010 with BSE before moving to a larger distributor in 2014 as a product specialist. After 3 years of being based in Johannesburg he relocated to Cape Town to run the branch in the Western Cape. Three years later he Hi-tec to look after their safety and security divisions.

"Working both as a distributor and an OEM gives me a good all round understanding of the PPE landscape in South Africa. I'm looking forward to using my experience to assist SAPEMA moving forward" says Geraint.

Buffy Rottcher



Karl, or better known as Buffy in the industry is the Product and Business Development Manager at uvex Safety South Africa where he has 14 years of experience. He started as a product consultant and worked his way up the PPE ladder. He is currently responsible for uvex Product Management, focusing on the following PPE categories: Eyewear, gloves, hearing, head protection, disposable workwear, respiratory protection and prescription safety eyewear.

Buffy serves as an Exco Member of SAPEMA and sits on the following SABS Technical committees: Eyewear, gloves, hearing, head protection, workwear, respiratory and fire and rescue.

Wessel Oosthuizen



Wessel is a technical product specialist at Karam Africa, specialising in fall arrest systems. With over 15 years of experience across sales, business development, and product marketing, Wessel has held key roles, including Territory Sales Manager and Business Development Manager in the industry. His expertise spans cross-border sales, customer relationship management, and brand management, particularly within the personal protective equipment (PPE) sector. Wessel takes pride in his national sales accomplishments and emphasises teamwork and leadership, consistently leading by example to achieve success not only personally but for all his teams and colleagues that he works with.

Ignore employee burnout at your peril

Warren Bonheim, co-founder of WorkStatz

Employee burnout is a serious challenge facing companies of all sizes in South Africa. As businesses navigate a competitive environment and difficult economic conditions, they are often pressured to “do more with less.” Unfortunately, this often results in employees bearing the brunt through increasing workloads and rising stress levels.

According to Warren Bonheim, co-founder of WorkStatz, finding the right balance between employee well-being and the demands of success is a significant challenge. “I have not seen such high burnout rates as in the last couple of years,” he notes.

The statistics back up his observation. A report from iSolve titled *Uncovering the Significant HR Trends of 2024* found that 65% of employees surveyed reported suffering from burnout.

Burnout and stress lead to exhaustion, lack of enthusiasm, and diminished performance. It not only impacts work productivity but also takes a toll on employees’ emotional and physical health. Burnout is so pervasive that it’s now classified as an occupational phenomenon in the International Classification of Diseases (ICD-11).

“Employees experiencing burnout, if left unaddressed by their employer, are more likely to seek positions that offer better work-life balance,” Bonheim adds.

“Often, managers only learn about burnout when it’s too late. This can happen for several reasons. Some employees fear that speaking up will have repercussions, such as being perceived as incompetent, weak, or unable to handle stress. Others blame themselves for not keeping up. And some are so driven to succeed that they don’t even realise they are heading towards burnout.”

However, it’s not all doom and gloom. Bonheim suggests several strategies employers can implement to manage and prevent burnout.

RECOGNISE THE EARLY WARNING SIGNS OF BURNOUT

Decreased productivity, abrupt changes in work hours, or shifts in behaviour like irritability or fatigue are indicators that intervention is needed.

Employers should proactively identify and address these warning signs early.

This approach not only prevents burnout but also fosters a supportive workplace culture that prioritises employee well-being.

EMPOWER MANAGERS WITH REAL-TIME DATA

Technology can offer insights into what’s happening “under the hood” in real-time. Using software tools to track employees’ work patterns

helps identify potential burnout risks early.

By monitoring activities like productivity, task completion rates, and break times, companies can pinpoint overload areas and take timely, preventive action.

FOCUS ON PRODUCTIVITY, NOT HOURS

Managers should prioritise productivity and effectiveness over hours spent.

Instead of only tracking the number of hours worked, task completion, work focus, and overall productivity should also be monitored.

Some days may require longer hours, while others might allow for shorter work periods. Ultimately it is about productivity during the hours worked that counts.

ENCOURAGE OPEN COMMUNICATION

Cultivate a culture where employees feel comfortable discussing workload and mental health concerns without fear of judgment or repercussions.

Regular check-ins and surveys provide safe avenues for employees to voice their concerns before burnout escalates.

EQUAL WORKLOAD DISTRIBUTION

Identify both overloaded and underutilised employees to ensure work is distributed evenly.

Overloading employees—even those willing to take on more—can result in lower quality work, burnout, and decreased productivity.

Companies that intervene early and ensure equitable workloads significantly improve team effectiveness.

PROMOTE WORK-LIFE BALANCE

Employers can play a crucial role by encouraging employees to take regular breaks and use their vacation time.

Offering flexible work arrangements, like remote work options or adjustable hours, also goes a long way in preventing burnout.

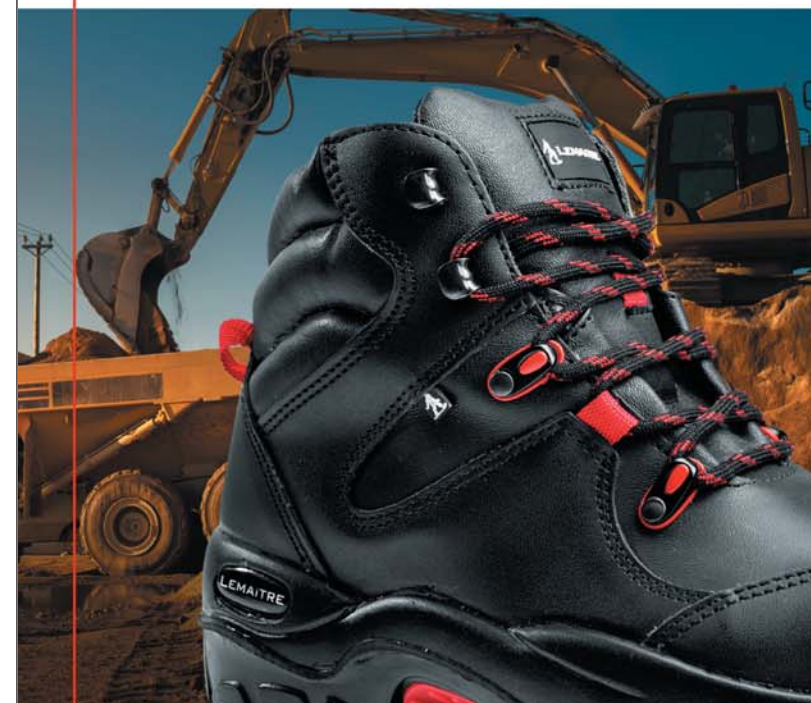
Employees value employers who empower them to manage their time effectively.

Ignoring employee burnout is a risk no company can afford. By taking proactive steps to recognise, manage, and prevent burnout, employers not only protect their employees’ well-being but also boost overall productivity and long-term business success.

After all, thriving employees are the cornerstone of a thriving company.



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**FROM ONE WORKER
TO ANOTHER**



From stress to strength:

The impact of mental health support in the workplace

The International SOS Group of Companies

This year's World Mental Health Day theme, "Mental Health at Work", is a crucial reminder for organisations to take action to safeguard their workforce's mental health and wellbeing. International SOS encourages organisations to recognise the critical importance of mental well-being and resilience within their workforce.

HEIGHTENED ANXIETY

The increasing frequency and intensity of global crises, coupled with elevated job demands, are contributing to heightened levels of stress and anxiety, further exacerbating mental health concerns among the global workforce. According to the World Health Organisation (WHO), an

estimated 15% of working-age adults experience a mental disorder at any single point in time.

Additionally, International SOS assistance data (2022 – 2024) reveals that over the past two years, the top five mental health-related assistance requests the organisation has received are:

1. Anxiety
2. Depression
3. Panic disorder
4. Attention Deficit Hyperactivity Disorder (ADHD)
5. Acute stress

Burnout has also become a prominent issue among employees, with one in four reporting symptoms of burnout. The International SOS Risk Outlook 2024 report highlights employee burnout as a major threat impacting organisations.

ECONOMIC IMPACT

Moreover, the economic impact of mental health issues cannot be ignored.

The WHO estimates that globally, approximately 12 billion working days are lost annually to depression and anxiety, resulting in US\$ 1 trillion in lost productivity per year. These figures underscore the immense cost of neglecting employee mental health and wellbeing at work.

Organisations play a pivotal role in shaping the mental health landscape by implementing policies and practices that promote wellbeing.

Dr Chris van Straten, Global Health Advisor Clinical Governance at International SOS said, "World Mental Health Day is a timely reminder for organisations to acknowledge and address the profound importance of mental wellbeing within their workforce.

"The workplace environment can have a significant impact on employee mental health, both positive and negative, by either fostering wellbeing or contributing to stress and anxiety. Just as we invest in employee physical safety, it is important to also understand that mental health is integral to overall health.

"Organisations can empower their employees to navigate challenges, thrive and contribute to a more positive and productive workplace by creating a supportive work environment that fosters open communication, empathy and understanding.

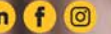
"Providing access to mental health professionals, counselling services, and employee assistance programmes is essential to ensure employees are equipped to navigate the complexities of today's global landscape."

ADVICE TO EMPLOYERS

1. **Cultivate a supportive work culture with strong leadership commitment:**
Prioritise and promote open communication on mental health. Ensure mental wellbeing initiatives are seamlessly integrated into relevant policies and practices to provide robust support.
2. **Provide accessible resources:**
Ensure employees have a toolkit of mental health resources at their fingertips, from counselling to self-guidance materials.
3. **Promote work-life balance:**
Offer flexible work arrangements and remote work options to help employees manage their personal and professional lives effectively. Encourage regular breaks and empower employees to prioritise their wellbeing.
4. **Training and education:**
Implement comprehensive mental health awareness campaigns to reduce stigma. Roll out mental health training, enabling everyone to spot, understand and assist with mental health challenges.
5. **Monitor and assess:**
Seek feedback and continuously monitor the mental health of employees through surveys and assessments. Adapt programmes as needed.
6. **Invest in emotional wellbeing:**
Provide access to mindfulness sessions and stress management training—partner with certified mental health professionals to offer confidential counselling and support services.
7. **Employee Assistance Programmes (EAPs):**
Provide EAPs that offer confidential counselling and support services to employees. Promoting the availability and benefits of EAPs can encourage employees to seek help without fear of stigma, fostering a culture of openness and support.

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Workplace mental health in Africa: The current state and negotiation for improvement



Ehi Iden is the President of OSHAfrica and Occupational Health & Safety Management Consultant in Africa.

Workplace mental health is a growing concern in Africa as a result of the fast mutation in work pace, work processes and changes in employment patterns. This is expected to get even worse as we continue to embrace modern technology and depend on machines and robots which are fiercely competing for work with their human counterparts. This will further change the entire landscape of workplace mental health with an increased burden of disease caused by excess work demand, burnout, longer hours of work, fear of loss of job and lone worker syndrome. The situation will be further exacerbated by the dismantling of existing human interactions and socialisation amongst workers in workplaces.

There is an urgent need to change the notion of seeing an employee solely as a tool for the profitability of the employer, who makes little or no provision for the employee's health and wellbeing. These same employers keep strictly to the dates that their machines are due for servicing, but never have scheduled dates within their calendars for employees' health and wellness assessments.

Concerns as highlighted above are underpinned with the absence or poor legislation of mental health at work in Africa. Most countries in Africa still lag behind in trying to have mental health concerns captured and rightly provided for in workplace safety and health legislation.

A number of countries now have a National Mental Health Act or mental health policies but these fall under the Ministry or Department of Health while most OSH departments fall under the ministries or departments of labour and employment.

Where mental health policies do exist, they often have not been ratified through consultations with the Ministry of Labour and Employment or other workplace safety and health stakeholders. It is therefore not surprising that many employers do not see themselves as co-owners of these policies.

In other situations, absence of these policies has made it difficult to hold employers accountable for violation of national workplace mental health provisions. A document of reference must exist before employers can be held accountable.

We need a strong political will for review and updating of existing national legislations. A number of countries across Africa govern their workplaces with obsolete OSH legislation that has no bearing on the new workplace and work-life-balance realities, with no element of mental health and employees' wellbeing provisions.

The urgent need for an early review of these documents is crucial. We at OSHAfrica we are

doing something about this. Even where these documents or legislation exist, they are not promoted or sold to employers of labour. Instead they are stacked away where they are made unreachable to those who need to interpret and include them in their corporate OSH policies.

Advocacy and education and the right definition of what workplace mental health is all about will be a quick fix to the current level of information deficit along the lines of mental health and wellbeing at work. The understanding of mental health has to scale up if we are to change the current perception of this disease in Africa. There are currently little to no definite programmes that are directed at mental health at work or psychosocial hazards that are imminent in our workplaces.

In having an honest conversation and drawing programmes on mental health at work, it will be wrong to isolate business leaders, human resources managers, employers of labour and others who are actively implementing these policies and programmes.

Across many countries in Africa, there is an urgent need to shift from the idea of developing a policy to actually embracing and participating in a policy. They must own one.

MENTAL HEALTH TREATMENT & REHABILITATION

Stigma

When we talk of mental health stigmatisation, we must first look at the location and design of mental health facilities. This is often the root of the stigma.

In many facilities, mental health units are located in some isolated and lonely wing of the hospital. It is therefore easy to identify any patient walking towards that direction as having a mental illness. This may turn many away from accessing care.

Most countries have special psychiatric hospitals. But people who need the treatment may feel ashamed to be seen entering such an institution and end up not accessing the service. Their condition is therefore left untreated. It is important to consider the location.

Shortage of mental health experts

Virtually every country in Africa needs mental health experts. In 2019, Kenya with almost 50 million population had only 80 psychiatrists and 30 clinical psychologists. Nigeria through its Association of Nigeria Psychiatrists reported 250 psychiatrists for 200 million population. Ethiopia with a population of 61 million people had only 10 psychiatrists, the shortage led to an estimated 85% of emotionally disturbed people seeking help from traditionally healers. (Prof Oye Gurege et.al.).

Training healthcare workers on mental health

When medical professionals are presented with co-morbidities of physical and mental illnesses, the physical illness are mostly taken care of, at the expense of mental health or other emotional disorders. The patients then continue living with a mental health condition that was not even diagnosed let alone treated.

Funding is a critical issue

At the Abuja declaration 2001, leaders of all countries in Africa met and pledged to increase their healthcare budget to 15%. Only one country has met this target, 26 countries have increased theirs, 11 countries have reduced theirs and there were no significant trends in the other 9 countries.

In most countries in Africa, only an average of 1% or less of their healthcare budget is allocated to mental health when compared with 6 – 12% in Europe and North America. This poor funding does not allow growth and improvement in management of mental illnesses in the region.

Insufficient mental health facilities

There are not enough mental health departments or facilities. Those that do exist are mostly in the cities. This has led to wide spread traditional practice including spiritual healers who may

complicate the condition with physical torture or putting their victims into chains.

OSHAfrica and AU-DA Partnership Project

OSHAfrica in partnership with AU DA are reviewing the Occupational Safety and Health legislation across the 54 African countries, looking for similarities and peculiarities in content and making provisions for areas that have not been covered or not adequately covered in existing legislation. Upon completion of these reviews, we will come up with a document titled "The African Occupational Safety and Health Act" which will be presented for further review by the African Union leadership for adoption and possible sign off for use across all 54 countries in Africa.

One of the key issues is to make clear and robust provisions for mental health at work and in the informal sector.

We are also looking at running Train-The-Trainer programmes on mental health at work across all the 5 sub regions in Africa.

We are also looking at designing a mental health at work training for business leaders. This is part of the mandate of the Scientific Committee in charge of OSH Education and Competency Improvement.

Manage your mental health at your own tempo

Madelein O'Connell,
Executive: Marketing, Sales
and Corporate Relations at
Bestmed Medical Scheme

Mental health month is a time to reflect on the need to break the stigma associated with seeking mental health support.

Today, many may acknowledge that mental health issues are common and can adversely affect a significant portion of the population. "In fact, according to the fourth annual Mental State of the World Report 2023, published in March 2024 by Sapien Labs, Brazil, South Africa and the United Kingdom all show the greatest proportion of respondents who are distressed or struggling with their mental health, which indicates that there is still a dire need for more open conversations about mental health in families, workplaces and communities," says Madelein O'Connell, Executive: Marketing, Sales and Corporate Relations at Bestmed Medical Scheme.

"We already know that our mental wellbeing can affect emotions, physical health, relationships and overall quality of life," adds O'Connell.

"Beyond this, neglecting your mental health can also lead to burnout, anxiety, and an array of serious health conditions. However, prioritising your mental health can be daunting, with so many not knowing where to start. It's important to remember that it starts with, and is built on, small, consistent steps, which can make a significant difference."

Medical schemes offer a range of benefits such as access to psychologists, psychiatrists, counsellors, and support for conditions like anxiety, depression, and trauma. It's important for members to understand what their medical scheme provides.

"We recognise that mental health covers a wide array of aspects. In fact, the World Health Organisation (WHO), defines mental health as 'a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community', so giving people the support and skills to navigate their life is vital, particularly those more vulnerable to mental health challenges, such as adolescents, the elderly, or individuals dealing with long-term physical illness" concludes Madelein O'Connell.

"We also recognise that limited mental health service availability, a shortage of mental health professionals and financial constraints can impact a person's ability to find the right support they need, when they need it. However, there are also some incredible mental health support organisations, locally, that can assist. These include LifeLine and The South African Depression and Anxiety Group (SADAG) which are confidential, free, and offer a starting point for anyone in need."

Mental health in the spotlight as suicide claims increase

Dr Reinhardt Erasmus,
Senior Medical Officer at
Liberty Group

Stress, anxiety, and depression are taking a heavy toll on South Africans. According to Liberty's 2023 claim statistics, mental health challenges are emerging as a health risk.

In light of this, South Africans are encouraged to prioritise their mental wellbeing and to seek the necessary help when faced with life changing events.

TIPS TO PRIORITISE MENTAL HEALTH

- **Seek professional help:**

Consult a mental health professional if you're experiencing prolonged stress, anxiety, or depression. Early intervention can prevent further complications.

- **Manage stress:**

Incorporate stress-relieving activities like regular exercise, mindfulness practices, or hobbies that promote relaxation into your routine.

- **Build a support network:**

Surround yourself with friends, family, or community groups who can provide emotional support during tough times.

- **Consider financial safeguard:**

Ensure you have disability insurance that covers mental health conditions, providing financial security for you and your family in case of incapacitation.

- **Promote work-life balance:**

Set boundaries between work and personal life to reduce burnout and maintain mental wellbeing.



The statistics reveal alarming trends:

- Men lodged 52.6% of claims related to depression and anxiety, while women accounted for 47.4%.
- Suicide was cited in 60% of all claims for mental disorders.
- Depression and anxiety contributed to 17.7% of all claims (up from 16% in 2022).
- Dementia appeared in 12.5% of mental health-related cases.
- November 2023 saw a sharp rise in claims, with nearly 20% of the year's mental disorder claims being lodged.

"What's particularly concerning is that suicide claims increased by 50% compared to 2022, and South Africans reporting stress to the extent that they cannot work is 11% higher than the global average of 39%, as noted in the Ipsos World Mental Health Day survey," says Dr Reinhardt Erasmus, Senior Medical Officer at Liberty.

A GROWING CRISIS

Psychiatric and neurological disorders are among the top five categories for claims within Liberty's Corporate Benefits division. This highlights the ongoing challenge posed by economic and social pressures, which are likely to drive up mental health claims even further.

"Unemployment, for example, often leads to feelings of self-doubt and hopelessness. Exposure to violence, trauma, and failed relationships are other frequently cited triggers of male suicide," says Erasmus.

MENTAL HEALTH AND PHYSICAL WELLNESS

A lesser-known consequence of mental health issues is their direct impact on physical health. "According to the World Health Organization, conditions like depression and anxiety can lead to cardiovascular problems, weakened immune function, and gastrointestinal issues," Erasmus explains.

"Depression is often linked to chronic diseases such as heart disease and diabetes."

DISABILITY INSURANCE

One of the best defences against the debilitating effects of mental health conditions, especially in the workplace, is disability insurance.

"If someone's employment is cut short due to mental health challenges, the financial consequences can be immediate and devastating, increasing stress and worsening their condition," says Erasmus.

Mental health in the South African construction industry

Dr Mhloimi Raliile and
Professor John Smallwood
Department of Construction
Management
Nelson Mandela University

Since 1992, the World Federation for Mental Health has commemorated World Mental Health Day during October, an international day for raising mental health awareness and advocacy against social stigma.

This year's theme: 'It is Time to Prioritize Mental Health in the Workplace' comes at a critical time when mental ill-health is adversely impacting the well-being and performance of the construction workforce in the South African construction industry.

Despite the industry's inherent demands and challenges, there is a notable lack of systematic understanding and targeted interventions to address mental health issues in the South African construction industry.

TRIGGERS IN THE CONSTRUCTION INDUSTRY

The construction industry is among the most accident-prone industries and among the leading industries with the highest rates of depression and anxiety compared to other industries.

Construction is also among the leading industries with the highest prevalence of suicide among its workforce; 52.5 per 100 000 for males in contrast to the suicide rate of 19.4 per 100 000 for the general male population. While this is the case, the focus has primarily been on safety and physical wellbeing. Therefore, a paradigm shift is imperative for the construction industry to realise that psychological wellbeing issues are just as important as the physical wellbeing issues.

Although it is unclear what causes mental ill-health among the construction workforce, it is evident that it is triggered by several stressors occurring both at work and outside the workplace environment.

External factors may result from social, political, and economic factors that affect organisational homeostasis. Micro factors could result from poor

organisational culture, conflicting role demands, role pressures, trauma, life-changes, work overload / underload, job uncertainty, payments, cash flow, lack of work-life balance, and personal issues.

These stressors can lead to the manifestation of stress, which may subsequently result in mental ill-health or trigger pre-existing mental health conditions.

Despite the known risk factors, the patho-mechanism of mental ill-health is intricate and still not fully understood, as it involves a combination of genetic, biological, and environmental factors.

In South Africa, it remains unclear what percentage of construction workers are affected by mental ill-health. The national statistics estimate that, one in six people suffer from depression, anxiety or substance-use problems. It may only be inferred that this number could be higher for construction workers based on global studies and a few studies conducted in South Africa.

South African construction firms are known to be culturally diverse and heavily integrated into the global economy, which is accompanied by a burden to create a sustainable, international, and competitive advantage through human capital.

To save the industry from its impending doom, it is imperative to address mental ill-health interventions. This requires a shift in culture, and a collaborative effort between the employer, the workers, the public, and primary health practitioners.

SOLUTIONS

Some of the immediate solutions could be achieved through mental health literacy and the identification of symptoms in the form of stressors in the workplaces.

Generally, toolbox talks, employee assistance programmes (EAPs), or wellness days aimed at the general workforce should be central to construction work. Many of the construction workers in South Africa are bread winners, and targeted interventions may benefit workers, especially well-being and financial management programmes.

Also, construction employees are among the most vulnerable groups and these programmes could assist in general, while individual cases may be dealt with more cautiously as mental health is still taboo.

Mental health hotlines or professional help such as seeking counselling could help individual workers struggling with mental issues.

It is easy to deal with a known problem, and to be aware of, and sensitive to mental ill-health in construction.



The PrCHSA's role in managing asbestos exposure risks in refurbishment and renovation projects:

Best practices for health and safety compliance in Type 2 and Type 3 work



Mongezi Kubukeli –
Founder and Managing
Director of SAFEPRAC,
PrCHSA (SACPCMP),
CMSaioh, Project
Manager (PMSA),
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In recent months, we have received numerous enquiries from clients, construction project managers, and health, safety & environment (HSE) practitioners seeking professional guidance on asbestos removal. In response, we have prepared this article as a compliance guide for managing asbestos health risks in building refurbishment and building renovation projects. While this guide aims to provide clarity on key aspects of asbestos management, it should not be considered a definitive or exhaustive resource.

Since 28 March 2008, South Africa has prohibited the use, production, export, and import of asbestos and asbestos-containing materials (ACMs). However, buildings constructed before this date may still contain asbestos, posing potential health risks during building renovation or refurbishment.

The Asbestos Abatement Regulations (AARs), which took effect in 2020, require property owners and employers to identify and assess any ACMs on their premises. This involves creating an asbestos inventory, conducting a risk assessment, and developing an asbestos management plan.

In practice, however, these requirements are often overlooked, with the responsibility for asbestos identification and management frequently falling on project teams. When guidance is sought, the role of a competent Professional Construction Health and Safety Agent (PrCHSA) becomes invaluable. Yet, only a limited number of PrCHSA's possess the specialised expertise needed to navigate asbestos risk management strategies effectively.

Drawing on my experiences as a PrCHSA and Registered Occupational Hygiene Assistant (ROHA), this article offers insights and best practices for handling asbestos exposure risks, ensuring compliance with regulations, and safeguarding "health" and safety on building refurbishment and building renovation projects.

THE UNIQUE RESPONSIBILITIES OF A PRCHSA

At the project planning phase (initiation), the PrCHSA conducts a site inspection or survey (CHSA Scope of Service Stage 1) to identify suspected asbestos-containing materials (ACMs). If any ACMs are suspected, the PrCHSA may "safely" collect bulk samples from strategic areas, which are then sent to a laboratory for analysis.

If the presence of ACMs is confirmed, the PrCHSA advises the client on whether an accredited Asbestos Inspection Authority (AIA) should be engaged to perform a comprehensive

asbestos survey (inventory) and risk assessment.

However, the industry practice often involves appointing an AIA automatically when ACMs are suspected, which can sometimes result in unnecessary costs if samples return negative for asbestos.

By following a more measured approach, the PrCHSA helps ensure resources are used effectively and client funds are preserved by confirming the need for an AIA only when absolutely necessary.

To ensure proper asbestos management and removal, the PrCHSA must fulfil and/or coordinate the following tasks:

- **Drafting the OHS Bill of Quantities (BOQ):** Develop a BOQ related to the AIA and asbestos contractor's services, and present it to the client and project manager or principal agent for approval.
- **Defining the AIA scope of service and preparing the tender/RFQ:** Clearly outline the AIA's scope of service and prepare the tender or Request for Quotation (RFQ) documentation.
- **Overseeing the AIA tender process:** Lead the tender process for the AIA, including evaluation, adjudication, and ultimately assisting with the appointment of a suitable AIA.
- **Developing the H&S Baseline Risk Assessment and H&S Specification** taking into consideration the inventory and health risk assessment from the AIA.
- **Drafting the Asbestos Contractor BOQ:** Upon the appointment of the AIA, draft the BOQ as informed by the inventory and health risk assessment, health and safety specification and baseline risk assessment for the asbestos contractor, incorporating guidance and recommendations from the AIA.
- **Managing the asbestos contractor tender process:** Oversee the selection and tendering process for the asbestos contractor, which includes determining the appropriate contract type.
- **Administering tender processes and managing budgets:** Collaborate with the client-appointed Quantity Surveyor (QS) to manage tender administration and OHS budgets throughout the asbestos removal process, from start to completion.
- **Providing oversight for the duration of the asbestos project** ensuring the protection of employees and the public at large.

It is also essential for the PrCHSA to facilitate

and verify that the client formally appoints both the AIA and the Registered Asbestos Contractor (RAC), as required by the Asbestos Abatement Regulations.

The PrCHSA provides oversight for the entire project to ensure that all parties, including the RAC and AIA, fulfil their responsibilities effectively. Additionally, the PrCHSA acts as a mediator in cases of conflict, helping to resolve issues and maintain compliance with regulatory standards.

NAVIGATING COMPLIANCE WITH ASBESTOS ABATEMENT REGULATIONS

Plan of work

Before asbestos work begins, a Plan of Work (POW) must be drafted by the AIA in consultation with the asbestos contractor to ensure compliance and safety.

The POW should include details such as contact information for involved parties, asbestos specifics (location, type, quantity), project timeline, air monitoring methods, removal and decontamination procedures, waste management, emergency protocols, and clearance certification requirements.

The POW must be approved and signed by the AIA, asbestos client, and asbestos contractor to confirm agreement and compliance, ensuring a comprehensive, safe approach to asbestos abatement.

Notification of asbestos work

For Type 2 and Type 3 asbestos work, the Registered Asbestos Contractor must ensure notification is provided as outlined in Annexure 2 of the Asbestos Abatement Regulations. This notification can be submitted by the Client, RAC, or AIA to the Chief Director of Provincial Operations in the relevant province. The Provincial Office will acknowledge receipt through a date stamp and signature, an email acknowledgment, or a letter on official Departmental letterhead, depending on their preferred method.

It is important to note that the notification must be accompanied by the plan of work, valid registrations for both the AIA and RAC, and any additional documents required by the Department of Employment and Labour (DEL), in terms of the Asbestos Abatement Regulations at least 7 days prior commencement of the asbestos work.

Duties of the RAC

The RAC is required to appoint a site-specific asbestos removal supervisor and health and safety representative(s) in writing to ensure that the plan of work is effectively implemented and monitored. Additionally, the RAC is responsible for maintaining and updating the on-site health and safety file, which must include all legal requirements outlined in the Occupational Health and Safety Act (OHS Act), relevant regulations, and any additional requirements specified in the Asbestos Abatement

Regulations (AAR).

Duties of the AIA

The AIA is responsible for a number of duties, including ensuring compliance with the plan of work, the Asbestos Abatement Regulations, and the Occupational Health and Safety (OHS) Act. Additionally, the AIA may be required to perform any other duties as specified by the client or the PrCHSA.

Among the AIA's key responsibilities:

- Conducting air monitoring throughout the project and providing detailed reports on compliance and any non-conformances.
- Offering guidance and recommendations for corrective measures to address any compliance issues identified.
- Upon project completion, verifying the safe disposal of Asbestos-Containing Materials (ACMs).
- Conducting a thorough clearance inspection and issuing an asbestos clearance certificate once reasonably satisfied that the area or building is free of ACMs.

OVERCOMING CHALLENGES SPECIFIC TO RENOVATIONS & REFURBISHMENT PROJECTS

Late appointments of PrCHSAs on projects often result in the identification of ACMs during construction, at a stage when budgets have not been allocated for necessary services such as AIAs and RACs. This oversight can significantly impact project timelines and costs, as the discovery of ACMs requires immediate action to ensure compliance with the Asbestos Abatement Regulations (AAR) and safeguard the health and safety of all personnel on-site.

When ACMs are identified without prior planning, projects may face delays due to the need to halt work, conduct thorough risk assessments, and secure the services of AIAs and RACs to manage the asbestos removal process. Moreover, budget constraints can lead to difficulties in protecting employee health and meeting legal obligations, potentially exposing project stakeholders to compliance risks and penalties.

To prevent these issues, it is essential to engage a PrCHSA early in the project planning stages. Clients, project managers or principal agents should appoint a PrCHSA at the outset to ensure that health and safety considerations are incorporated into project feasibility studies.

Early involvement allows for proper asbestos surveys and risk assessments, helping to identify ACMs before construction begins and allocate adequate budgets for AIA and RAC services. This proactive approach not only minimises health risks and legal liabilities but also helps maintain project schedules and financial control.





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ALCO-Safe expands breathalyser offerings with LION 900

from LION Laboratories



Rhys Evans, Managing Director of ALCO-Safe

ALCO-Safe is pleased to announce the addition of the LION 900 breathalyser to its product line.

Developed by LION Laboratories, the LION 900 is a cutting-edge handheld device designed for fast, accurate, and on-the-spot determination of a subject's breath alcohol concentration level.

UNMATCHED ACCURACY AND STABILITY

The LION 900 features a revolutionary electro-chemical fuel cell sensor that delivers exceptional accuracy and stability in delivering reliable breath alcohol readings. This translates to consistent readings and confident decision-making in safety-critical situations, which ensures legal defensibility in court through adherence to strict standards and reduces long-term costs by minimising calibration needs and extending sensor lifespan.

"The LION 900 represents a significant leap forward in breathalyser technology. Its exceptional accuracy, advanced connectivity features, cloud-based app integration with industry-leading compliance certifications, and future-proof design make it an invaluable tool for a wide range of applications," notes Rhys Evans, Managing Director of ALCO-Safe.

SEAMLESS CONNECTIVITY AND CLOUD INTEGRATION

The LION 900 goes beyond basic breath alcohol testing. Bluetooth connectivity allows for effortless connection to various devices like printers, PCs, or

mobile phones. GPS technology provides pinpoint location data for each test, ensuring transparency and detailed record-keeping. Test data can be uploaded to a secure, cloud-based app, enabling:

- Centralised data management: Access and manage all test results from a single location.
- Customisable reporting: Generate reports tailored to your specific needs.
- Actionable insights: Gain valuable insights into testing trends and identify potential areas of concern.

WHITE-LABEL CLOUD APP FOR INCREASED CUSTOMISATION

ALCO-Safe takes data management a step further with a unique white-labelling opportunity. The cloud-based app can be customised to a company's

branding, allowing companies to develop specific features and functionalities to meet their needs, depending on the use case.

INDUSTRY-LEADING COMPLIANCE FOR EVIDENTIARY RELIABILITY

The LION 900 is certified to EN 15964, the European standard for evidential breathalysers. This rigorous certification ensures the device meets the strictest requirements for accuracy, reliability, and tamper-proof operation. Additionally, the LION 900 boasts an IP54 rating, signifying its resistance to dust and water ingress. These certifications solidify the LION 900's role in legal proceedings, and in the event of a dismissal hearing due to alleged alcohol use, the integrity of a breath test conducted with the LION 900 will be tough to dispute.

FUTURE-PROOF DESIGN

The LION 900 is built for the future. Its powerful processor paves the way for ongoing software updates, introducing new features and functionalities over time. This ensures the breathalyser remains at the forefront of technological advancements, ensuring the longevity and relevance of the device long after purchase.

IMMENSE BENEFITS ACROSS MULTIPLE INDUSTRIES

The LION 900 caters to various industries with its unique features:

- **Transportation:** Companies with mobile workforces can leverage the app to track testing completion, location data, and generate reports for improved safety compliance.
- **Manufacturing:** Multi-site operations can monitor testing frequency, identify areas requiring additional focus, generate custom reports for informed decision-making and enhance internal processes.
- **Law Enforcement:** Improved roadside testing efficiency with location verification, and streamlined data management via the cloud app, which has the potential to reduce corruption and the possibility of accepting bribes at roadblocks.

"We are particularly excited about the potential of the LION 900 to empower businesses with the data and insights they need to make informed decisions about workplace safety. The cloud-based app and customisable reporting features are game-changers in this regard," concludes Evans.

For more information about the LION 900 breathalyser visit <https://www.alcosafe.co.za>

Workplace diversity, inclusion and care:

A segment of mental health and well-being



Han Wenqi is an experienced workplace safety and health professional from Singapore, and an advocator with 15 years of industrial safety experience. He is a lecturer for the Bachelor of Science in SHEM and MSc in OHSW. He is currently a guest speaker / associate lecturer with the Leeds Beckett University, Cardiff Metropolitan University. His experience is highly sought after in Singapore mega projects.

Mental health affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Good mental health is indispensable to effective personal functioning, interpersonal and career work life, family relationships, and community life.

On the other hand, depression, anxieties, addictive behaviours, and severe physical pain make it difficult to attain and maintain well-being. These conditions interfere with the ability to see beyond one's immediate negative experience.

MENTAL DISORDERS

Mental disorders result from complex interactions between individuals' genes and their environment. Lifestyle factors and health behaviours include smoking and exercise, and life experiences, such as severe and prolonged stress or a history of abuse.

A traumatic brain injury or a woman's exposure to viruses or toxic chemicals while pregnant may also result in a mental disorder.

Other factors that can increase the risk for mental illness are the use of illegal drugs or having a serious medical condition like cancer.

Employee's mental well-being can be affected by psychosocial hazards arising from individual and organisation factors such as:

- **Uncertainty** (e.g., expectations in the workplace, pay or working hours);
- **Workload and work pace** (e.g., tight deadlines, irregular work volume);
- **Working hours** (e.g., unpredictable hours, reduced or extended hours, new shift patterns, unclear after-hours work communication);
- **Role ambiguity** (e.g., no clearly defined job scope, increasing roles within same job position);
- **Lack of control** (e.g., rapid changes in risk levels, leading to sudden enforcement or easing of restrictions or modified ways of working);
- **Lack of social support** (e.g., loneliness, physical isolation, communication challenges);
- **Prolonged isolation and remote working** (e.g., fatigue, unsuitable working conditions, lack of social support, over-exposure to screens);
- **Job insecurity** (e.g., concern about possible job loss, domestic financial issues);
- **Balancing work and home life** (e.g., caregiving responsibilities, family emergencies, needing to work outside of normal working hours);
- **Roles with circumstantial pressures** (e.g., front-line, public facing, mobile working);

- **Individual circumstances** (e.g., belonging to a vulnerable group, bereavement, or serious illness in the family);
- **Workplace harassment** (e.g., threatening, abusive, or insulting language, comments or other non-verbal gestures; cyber bullying; sexual harassment; stalking).

Mental disorders may also result from prolonged exposure to environmental and other forms of hazards in the workplace. See examples below:

- **Physical** (e.g., fire, noise, ergonomics, heat, radiation);
- **Mechanical** (e.g., moving parts, rotating parts);
- **Electrical** (e.g., voltage, current, static charge, magnetic fields);
- **Chemical** (e.g., flammables, toxics, corrosives, reactive materials);
- **Biological** (e.g., blood-borne pathogens, virus);
- **Psychosocial** (e.g., stress, fatigue);
- **Human and cultural factors** (e.g., excessive workload, prolonged working hours, inadequate training, inadequate acclimatisation to hot work environment, health risks uncovered from medical examinations, individual susceptibility to certain health risks, smoking and alcohol misuse);
- **Workplace or work-related factors** (e.g., hazardous activities; compatibility of work activities; non-routine work activities and situations; and environmental conditions).

A list of common mental disorder and illness are identified in past medical research for better risk management strategy to eradicate them. These include anxiety disorders, mood disorders, psychotic disorders, personality disorder, eating disorders, substance-related and addiction disorders, neuro-developmental disorders, trauma- and stressor-related disorders.

WELL-BEING

During the past decade, mental health treatments focused largely on reducing symptoms or returning the individuals to their previous level of functioning.

Treatment now also focuses on increasing individuals' functioning, resilience, and prevention. This is known as well-being. It is an indicator of how well individuals perceive their lives to be going. It reflects several health, job, family, and social outcomes.

Accordingly, higher levels of well-being are associated with decreased risk of disease, illness,

and injury. It is associated with faster recovery for illness, better immunity, increased longevity, and better mental health.

Those with high levels of well-being are more productive at work, tend to get along better with their colleagues, and are more likely to contribute to their communities.

Well-being involves the presence of positive emotions and the absence of negative emotions. It includes satisfaction with life, a sense of personal fulfilment, and positive functioning. In short, it is about judging life positively and feeling good.

ABANDONMENT

Abandonment is a set of emotional reactions and behavioural responses to perceptions of rejection or loss in personal relationships. Abandonment issues develop in childhood, cause stress in relationships, and are treatable. Feelings of abandonment include fear, sadness, loneliness, anger, and worry in response to perceived rejection and disapproval.

Breaking up with a boyfriend or girlfriend, not being accepted by peers, someone not returning a phone call, or not being included in activities (such as in the workplace) are examples of events that can cause feelings of abandonment.

An example of abandonment in the workplace is the feeling of disappointment when an individual is not asked to discuss their departmental work scope with a group of colleagues. Even though this may not be intentional, but rather a misunderstanding, the person may feel disappointed or annoyed and will perceive this as a personal rejection.

The person may worry excessively over what he or she may have done to cause the rejection. He or she may then become enraged at being treated that way and spend days thinking about it and wondering why he or she was treated so unfairly.

People with abandonment issues take things very personally, perceive events as extremely hurtful and are often overwhelmed by emotion.

Abandonment issues often develop in childhood resulting in insecure and sensitive adults.

Symptoms of abandonment include the following categories and examples:

- **Clinging:** desperation to remain close, needing constant reassurance of approval, an excessive need for affection and attention.
- **Emotional blackmail:** threats of self-harm or rejection to continue the relationship.
- **Low self-worth:** judging oneself by the perception of how others feel or think about you.
- **Overreaction:** excessive fear or panic reactions to small matters such as someone not answering a phone or not calling back right away.
- **Submissive behaviours:** doing things you do not want to prevent others from rejecting you.

Solutions

The process of overcoming abandonment issues requires the help and assessment of mental health professionals. Talking therapies such as cognitive behaviour therapy or dialectical behaviour therapy can be effective in the treatment

Psychiatric medications are not prescribed in the direct treatment of abandonment issues but may be prescribed for individuals suffering from excessive anxiety and panic that is often associated with abandonment issues.

Other feasible measures to overcome abandonment issues include:

- Appoint mental well-being champions to raise employees' awareness on mental well-being and mental health conditions through talks and workshops.
- Form peer-support networks.
- Review HR policies to ensure hiring practices, workplace practices and performance management systems are non-discriminatory and merit-based.
- Promote a culture of trust, care and support by acknowledging that experiences are unique to every work
- Acknowledge that workers' anxieties, or difficulties are valid and should be respected.
- Hold regular meetings (remote or physical, as appropriate) with workers to discuss their issues and anxieties, and find ways to support the workers, and give them assurance that their conversations will be kept confidential.
- Give regular, clear, and accurate information about the current situation in the organisation and the planned changes that can affect workers.
- Keep employees updated of company's work, salary and leave arrangements.
- Offer additional resources to assist workers with managing their own psychological health and well-being (e.g., employee assistance programmes, trauma counselling, financial advice etc).

DIVERSITY AND INCLUSION PROGRAMMES

Acculturation and assimilation is the process of adapting to cultural differences between the minority and majority group.

Four key considerations of acculturation and assimilation are:

- **Acculturative stress** - psychological and social challenges that members of a racial or ethnic minority experience as they adapt to the culture of the majority group.
- **Biculturalism** - the coexistence of two separate, distinct cultures.

- **Culture** - the customary language, practices, attitudes, and traditions of a particular racial or ethnic group.
- **Enculturation** - the process of first-culture learning, in other words one's primary culture. It must be ascertained whether the individual retains or rejects his or her native culture, or if the individual adopts or denies the majority culture.

ACCULTURATIVE STRESS

Individuals who assimilate adopt the cultural norms of the majority over their minority culture. Those who don't assimilate reject the majority culture and choose to preserve their native customs. Those who integrate adopt the norms of the dominant culture while still maintaining their original cultural identity and are referred to as bicultural.

Then there's marginalisation, when an individual rejects both the native culture and the culture of the majority group.

Starting a new job can be coupled with positive and negative emotions. This includes culture shock which is the anxiety one experiences on leaving familiar people and surroundings and replacing them with the unfamiliar.

Pressure to conform to the dominant group's culture can also result in acculturative stress. Stress and anxiety can be compounded if either side lacks multicultural competence or if prejudicial/discriminatory views are held.

In melting pot societies it is important that assimilation is promoted and group differences respected.

Diversity must be valued so that members are given time to integrate the dominant culture into their lives. Simultaneously, members of the larger culture must learn to respect the minority groups' culture.

Solutions

Risk mitigating measures must be introduced in the workplace.

- **Pre-employment screening, interviews and evaluation:** this could include consideration on the enculturation factors.
- **Buddy system for new employees:** to ensure assistance is available during the blending in / adaptation period. The buddy should have a similar background.
- **Celebrating all festivals:** this could help the various groups understand each other.
- **Language proficiency:** this must not be assumed as it can be a significant source of pressure and anxiety for immigrants.

- **Discrimination and lack of intercultural competence:** assistance to build inter-cultural competence and eliminate discrimination must be integrated in the workplace.

ACUTE STRESS DISORDER

Acute stress disorder is characterised by recurrent and upsetting thoughts, inability to sleep or concentrate, or dissociation following a traumatic event. It is similar to post-traumatic stress disorder and is often confused with it. The difference is the duration of symptoms - where acute stress disorder symptoms last less than one month.

Those with this disorder often re-experience the traumatic event with the accompanying distressing symptoms. Emergency responders and hospital staff often suffer from this disorder.

The severity of the disorder increases if the event violates the individual directly and is further worsened by the severity of the incident.

Individuals who manifest this disorder are likely to experience intrusive and recurrent thoughts such as guilt. These individuals may become irritable, or temperamental. They may be anxious and hyper-vigilant of threats. Their symptoms might include avoiding to that of the trauma.

This is especially relevant in the working environment where the traumatic situation may have been caused in the workplace.

Solutions

- **Engage a mental health counsellor:** they would speak to casualties and injured employees who may be suffering psychologically from traumatic events.
- **Cognitive behaviour therapy (CBT):** a form of psychotherapy that focuses on changing maladaptive (faulty) behaviours, emotions, and thoughts.
- **Cognitive restructuring:** a psychotherapy technique for identifying maladaptive (unhealthy) thoughts and changing them to present a more accurate view of a situation.
- **Exposure therapy:** a behaviour therapy intervention for people exposed to a feared object or situation such as a major traumatic workplace accident. These accidents may include, but are not limited to witnessing a fall from heights, a workplace fatality and machinery or structure collapse or experiencing a workplace explosion.

CONCLUSION

Regular psychotherapy and counselling sessions to understand, evaluate and treat employees must be a priority.

Artificial intelligence use (example) in OHS practice



By Leighton Bennett,
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Safety First Association
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Artificial Intelligence (AI) is the “Issue Big Topic” in the world today and is now being raised in the Occupational Health & Safety profession and field. To test the AI response to an OHS question I asked Meta AI about “the health and safety procedure for excavations work”. Meta AI’s immediate response:

1. ***Risk Assessment***: Conduct a thorough risk assessment before starting the excavation work to identify potential hazards and take necessary precautions.
2. ***Site Preparation***: Clear the site of debris, obstacles, and utilities. Mark out the excavation area with warning tapes and signs.
3. ***Excavation Safety Plan***: Develop a site-specific excavation safety plan, including emergency procedures and rescue plans.
4. ***Trenching Safety***: When trenching, ensure the trench is:
 - Less than 4 feet (1.2m) deep or benched for deeper trenches
 - Shored or sloped to prevent collapse
 - Supported with trench boxes or shields
 - Inspected daily by a competent person
5. ***Personal Protective Equipment (PPE)***: Ensure workers wear appropriate PPE, including:
 - Hard hats
 - Safety glasses
 - Earplugs
 - Steel-toed boots
 - High-visibility vests
 - Respirators (if needed)
6. ***Fall Protection***: Prevent falls into excavations by:
 - Installing guardrails or barriers
 - Using safety nets or catch platforms
 - Ensuring adequate lighting
7. ***Hazardous Atmospheres***: Test for hazardous gases and oxygen levels before entering excavations. Use ventilation systems or respirators as needed.
8. ***Emergency Procedures***: Establish emergency procedures for:
 - Rescue operations
 - First aid
 - Fire response
 - Evacuation
9. ***Training and Supervision***: Ensure workers are trained on excavation safety procedures and are supervised by a competent person.
10. ***Regular Inspections***: Conduct regular inspections to ensure the excavation site remains safe and compliant with regulations.

Remember to always follow local regulations and industry standards, such as OSHA guidelines in the United States, to ensure a safe excavation site.

At first glance, the Meta AI response information gives a very good overview of the **principles of excavation work safety**, but for a safe working procedure the practical “how” of excavation safety is missing.

Technical Note: the training learning data set/s information which the Meta AI used in its machine learning code to develop its assessment Algorithms was overseas OHS legislation and guidance based, so no 2014 Construction Regulation requirements were considered in this response.

I asked my question again, and got the following Meta AI response:

Excavation work can be hazardous if proper health and safety procedures are not followed. Here are some essential health and safety procedures for excavation work:

1. ***Conduct a risk assessment***: Identify potential hazards and develop a plan to mitigate them.
2. ***Develop a safe work method statement***: Outline the steps to be taken to complete the excavation work safely.
3. ***Provide training and supervision***: Ensure workers are trained and supervised to perform excavation work safely.
4. ***Use personal protective equipment (PPE)***: Hard hats, safety glasses, earplugs, gloves, and steel-capped boots are essential.
5. ***Install shoring and bracing***: Prevent collapse of excavation walls and floors.
6. ***Ensure proper ventilation***: Prevent buildup of hazardous gases and dust.
7. ***Use appropriate access and egress***: Ensure safe entry and exit from the excavation site.
8. ***Monitor weather conditions***: Avoid excavation work during heavy rain, strong winds, or extreme temperatures.
9. ***Use appropriate signage and barricades***: Warn others of the excavation work and prevent unauthorized access.
10. ***Regularly inspect and maintain equipment***: Ensure all equipment is in good working condition.

Some additional resources that may be helpful include:

- OSHA (Occupational Safety and Health Administration) guidelines for excavation safety
- National Institute for Occupational Safety and Health (NIOSH) publications on excavation safety
- American Society of Civil Engineers (ASCE) guidelines for excavation safety

Remember, safety should always be the top priority when working with excavations!

Looking at this second Meta AI response, there is more actual “how” to perform excavation work safety information. But it still misses some of the 2014 Construction Regulation requirements. For example, the section 13 requirements to perform daily excavation safety inspections and record the findings. It also misses section 4, where the Department of Employment & Labour must be notified of the excavation construction work.

The given points 1 and 2 listed above, on Conducting a Risk Assessment and Developing a Safety Working Method Statement need to be site-specific and not just a copy and paste of generic documents. I often see this as a practicing Pr..CHSA.

One should consider performing a Job-Task Step Excavation Risk Assessment, rather than a HIRA format risk assessment, to ensure each and every task step risk is identified, and that these risks are suitably mitigated. This Job-Task Step Risk Assessment forms the basis for developing a good Excavation Safety Working Method Statement or Safe Working Procedures for communication to the excavation workers.

As I shared these Meta AI responses with a third party on WhatsApp, I received the following Meta AI response.

I’m glad I could provide a helpful response, Leighton! Excavation safety is a critical aspect of construction and infrastructure projects, and it’s important to prioritize health and safety procedures to prevent accidents and ensure a safe working environment.

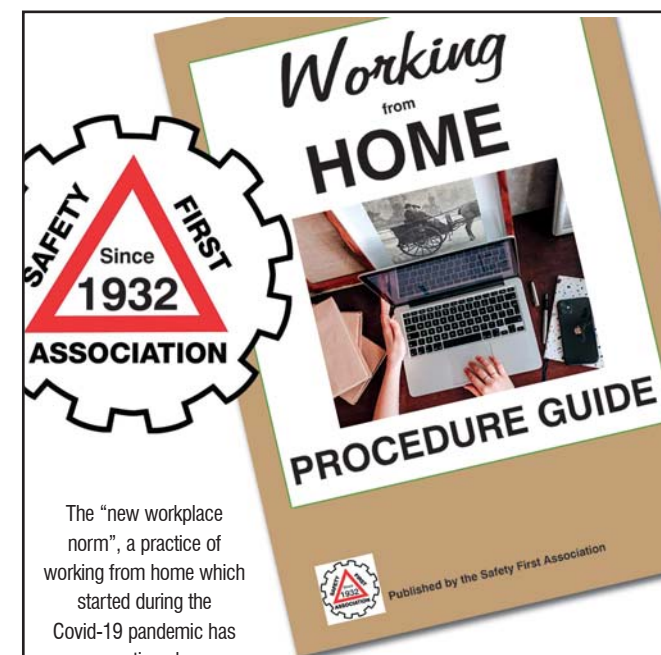
If you have any more questions or need further clarification on any of the points I mentioned, please don’t hesitate to ask. I’m here to help and provide guidance on implementing effective health and safety procedures for excavation work.

Remember, safety is everyone’s responsibility, and by working together, we can create a safer and healthier workplace for all!

Based on this experience using Meta AI, it is easy to see how many people think and feel AI can be or is good for OHS practice.

But we as OHS practitioners and professionals need to be vigilant that the AI information provided to a workplace is both accurate and appropriate for the actual job-task application, especially when we obtain, use and provide AI generated safety practices and procedures for workplaces.

Remember: Errors In Safety Practice and Procedures can cause a loss of life!



The “new workplace norm”, a practice of working from home which started during the Covid-19 pandemic has continued.

The employer is required to provide, maintain and ensure a safe and healthy workplace for all his/her employees at the company premises and this extends to work at essentially a remote employee “workplace” venue where required.

This guide details all health and safety requirements that need to be applied to both the company employee working from home and the responsibility of the employer.

To order a copy email: debbie@safety1st.co.za

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Understanding the Energy Performance Certificate (EPC): Its impact in South Africa



Herman (Harry) Fourie has a passion for occupational health and safety and has been working in the industry for many years. He is Vice-Chairman of the Safety First Association.

WHAT IS THE EPC?

An Energy Performance Certificate (EPC) is a document that provides an energy efficiency rating for buildings, ranging from A (most efficient) to G (least efficient). The rating is based on various factors, including the building's construction, insulation, heating, cooling, and lighting systems. The EPC also includes recommendations for improving the building's energy efficiency.

WHY WAS THE EPC IMPLEMENTED IN SA?

The EPC was implemented in South Africa as part of the country's commitment to improving energy efficiency and reducing carbon emissions. With increasing energy demands and the pressure on the national power grid, the government recognised the need to encourage more efficient use of energy resources. The EPC serves as a tool to promote energy-saving measures and to raise awareness about the importance of energy efficiency in buildings.

THE PURPOSE OF THE EPC

The primary purposes of the EPC are to:

- Promote energy efficiency:** By providing a clear indication of a building's energy performance, the EPC encourages owners and occupants to take steps to improve energy efficiency.
- Reduce carbon emissions:** Improving energy efficiency helps to reduce the carbon footprint of buildings, contributing to national and global efforts to combat climate change.
- Enhance building standards:** The EPC drives the adoption of better construction and maintenance practices, leading to more sustainable and cost-effective buildings.

BENEFITS TO BUSINESSES & ORGANIZATIONS

Businesses and organisations can derive several benefits from obtaining an EPC:

- Cost savings:** Implementing energy efficiency measures can lead to significant reductions in energy costs - especially beneficial in a country with high energy prices and supply challenges.
- Enhanced asset value:** Buildings with higher energy efficiency ratings are often more attractive to buyers and tenants, potentially increasing the property's market value.
- Compliance and reputation:** Adhering to energy efficiency regulations helps businesses avoid penalties and enhances their reputation as environmentally responsible entities.

WHO WILL BENEFIT FROM THE EPC?

The EPC benefits a wide range of stakeholders:

- Property owners and managers:** They gain insights

into their buildings' energy performance and receive recommendations for improvement.

- Tenants and occupants:** Energy-efficient buildings provide a more comfortable living and working environment and lower utility bills.
- The environment:** Reduced energy consumption leads to lower greenhouse gas emissions, benefiting the broader community and contributing to environmental sustainability.

PRACTICABILITY OF IMPLEMENTATION

Implementing the EPC is practical and feasible, though it requires commitment and investment. Key factors influencing its practicability include:

- Availability of expertise:** Adequate training and certification programmes are necessary to ensure that qualified professionals can conduct energy assessments and issue EPCs.
- Initial costs:** There may be upfront costs with energy audits and implementing recommended improvements, but the long-term savings and benefits often outweigh these expenses.
- Regulatory support:** Strong regulatory frameworks and incentives can facilitate the widespread adoption of the EPC.

IMPACT ON OCCUPATIONAL HEALTH & SAFETY

The implementation of EPCs has several positive implications for OHS:

- Improved indoor environments:** Energy-efficient buildings often have better ventilation, lighting, and temperature control, creating healthier and more comfortable workplaces.
- Reduced risk of energy-related hazards:** Enhanced energy management can reduce the likelihood of electrical faults and other energy-related hazards, contributing to a safer working environment.
- Promotion of sustainable practices:** The focus on sustainability and energy efficiency aligns with broader OHS goals of creating safe, healthy, and sustainable workplaces.

CONCLUSION

The introduction of the EPC in South Africa represents a significant step towards enhancing energy efficiency, reducing carbon emissions, and promoting sustainable building practices.

While the implementation of EPCs requires careful planning and investment, the long-term benefits for businesses, the environment, and occupational health and safety are substantial.

By embracing the EPC framework, South Africa can move closer to its energy efficiency goals and foster a culture of sustainability and safety in the built environment.



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 - Location-based Events
 - Interconnected Eco-system
 - Android App Support

- SIMPLE**
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 - Electronic Reports
 - Interactive Dashboard
 - Intuitive App Interface
 - Auto-feature Updates



SAIOH President's Message

Naadiya Mundy: SAIOH President, e-mail: president@saioh.co.za

SAIOH is dedicated to its members and the profession as a whole. As part of our commitment, we regularly share updates and developments with our members. SAIOH exists for its members and rely on your involvement and ethical contributions in the field of occupational hygiene.

To strengthen this bond, we encourage feedback and input from on the matters discussed, ensuring a collaborative and member-driven approach to our institute.

As a council term ends, it's a poignant moment to bid farewell. The outgoing members leave behind a legacy of enthusiasm for SAIOH and occupational hygiene, driving excellence and individuality. Their creativity, positivity, and passion energise the institute. Although their council term has ended, their impact continues, whether as an immediate past president, chair, or council member. This marks the end of an era, but also the beginning of a new one, full of opportunities and possibilities.

Decoding the pathophysiology of Noise-Induced Hearing Loss: Insights into interventions



Noise-Induced Hearing Loss (NIHL) is a form of sensorineural auditory damage that results from prolonged or acute exposure to elevated sound levels¹. It primarily affects the inner ear structures, notably the cochlear hair cells, which are responsible for converting sound waves into electrical signals. Damage to these cells occurs due to excessive noise exposure from occupational or recreational activities, leading to a permanent loss in hearing sensitivity.

Imagine a dandelion, one of those fluffy, delicate flowers made of hundreds of tiny white seeds. With just the slightest breeze, the seeds take flight, drifting away on the wind. Now, picture your inner ear as that dandelion. Every tiny hair cell inside your cochlea is like one of those seeds, soft and fragile, essential for catching and converting sound vibrations into signals your brain can understand.

When exposed to noise — whether it's a construction site, factory machinery, or even a concert — it's like a strong gust of wind blowing against that dandelion. The more intense the wind, the more seeds are scattered and lost. Once those seeds are gone, they do not come back. Just like a dandelion missing its seeds, the inner ear, once damaged by loud sounds, cannot regenerate its hair cells.

As noise exposure continues, more of the delicate seeds are lost, and slowly, your hearing fades. It's not immediate, like a sudden storm wiping the dandelion clean, but rather a gradual scattering of your hearing abilities. Each gust — each burst of loud noise — takes a few more seeds until eventually, you've lost a significant part of that once-fluffy dandelion.

The biological mechanisms responsible for this type of hearing loss, known as the pathophysiology of noise, involve complex processes within the

auditory system. Understanding these processes is crucial for preventing and mitigating the risks associated with noise exposure. This mechanical damage, caused by excessive noise levels, is a critical factor in the development of NIHL.

NIHL can result from a variety of factors e.g. environmental, physiological, genetic and lifestyle. Loud noise induces hearing loss through several mechanisms, including mechanical damage to cochlear structures², decreased blood flow, sterile inflammation, and oxidative stress alongside excitotoxicity resulting from the overstimulation of hair cells and nerves¹.

The severity of damage from noise exposure is influenced by several variables, including characteristics of the sound stimulus, such as intensity, spectral energy, and duration, as well as the physical, mechanical, and chemical properties of the outer, middle, and inner ear³.

The middle and inner ear play critical roles in the pathophysiology of noise-induced hearing loss (NIHL). The middle ear, which includes the tympanic membrane and ossicular chain, amplifies sound waves for transmission to the inner ear. However, exposure to high-intensity noise can cause mechanical damage to these structures, leading to impaired sound transmission and increased vulnerability to further auditory injury³.

In the inner ear, the cochlea is responsible for converting sound waves into neural signals, with specific regions stimulated based on sound frequency due to the traveling wave theory³.

Loud noise exposure can lead to cochlear synaptopathy, characterised by the loss of synapses between inner hair cells and auditory nerve fibres, resulting in difficulties in hearing, particularly in noisy environments, as well as symptoms such as tinnitus and hyperacusis.



Consequently, the combined effects of mechanical damage in the middle ear and cellular damage in the inner ear highlight the complex pathophysiological processes underlying NIHL, underscoring the importance of protective measures and interventions to mitigate hearing loss.

Noise-induced hearing loss (NIHL) presents primarily as temporary threshold shifts (TTS) or permanent threshold shifts (PTS). TTS occurs after short-term exposure or acoustic trauma, typically recovering within a few days, and is mainly caused by the reversible uncoupling of outer hair cell stereocilia from the tectorial membrane, although synaptopathic mechanisms may also play a role².

In contrast, PTS results from chronic noise exposure or trauma, leading to irreversible loss of outer hair cells, particularly at the cochlea's basal turn, followed by degeneration of the auditory nerve².

NIHL arises from the interplay of genetic and environmental factors, adhering to the equal-energy principle, which posits that equal amount of noise exposure—whether high levels over a short duration or lower levels over an extended period—cause similar cochlear damage³.

Understanding the mechanisms and effects of noise-induced hearing loss (NIHL) is essential for interventions in occupational hygiene because it informs risk assessment and prevention strategies.

Recognising noise as a toxin with acute and cumulative effects allows occupational hygienists to implement effective control measures e.g. engineering controls, administrative changes, and

personal protective equipment (PPE) to minimise exposure.

Awareness of TTS and PTS, enables the creation of monitoring programmes to detect early signs of hearing loss, facilitating timely intervention and management.

Educating workers about the factors contributing to NIHL empowers them to take proactive measures for their hearing protection. Additionally, knowledge of the underlying pathological processes involved in NIHL can lead to innovative interventions and research into protective strategies.

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This is Naadiya's conclusive piece, marking the culmination of her presidency. As she steps down, Karen du Preez prepares to take the reins, assuming the position of SAIOH President in 2025.

National council feedback

Naadiya Mundy: SAIOH president, e-mail: president@saioh.co.za

Deon Jansen van Vuuren: SAIOH general manager, e-mail: deon.jvvuuren@gmail.com

Two SAIOH Management Board meetings took place on 30 July 2024 and 1 October 2024, respectively.

The third SAIOH National Council meeting is scheduled to take place at the SAIOH Conference in Gaborone on 22 October 2024.

SAIOH Council members have had a busy few months with numerous meetings taking place over this period.

Some of these interactions included SAIOH's revamped website population, 2024 conference organising, planning committee meetings as well as collaborative discussions with Prof Johan du Plessis of Northwest University (NWU) regarding the developing of SAIOH's own Ethics course.

Meetings also took place to evaluate SAIOH fellow award nominations, the SAIOH 2023 Annual Awards, and admin staff meetings.

SAIOH management also hosted and attended the DoEL/SAIOH/OH AIA Association Liaison

meeting 6 September 2024, as well as attended the South African National Accreditation Authority's occupational hygiene Special Technical Committee and OH AIA Association's where 4 new OH Technical Assessors qualified.

SAIOH participated in the Occupational Health Southern Africa (OHSA) Editorial Board, and Naadiya attended the ongoing meetings with the WHWB, IOHA Ass's and OH organisations to discuss and plan action strategies with regard to the threat to occupational hygiene worldwide.



Strategic plan

The current SAIOH strategy (5-year) plan is steered by Jaco Pieterse. The strategy is discussed, and progress thereof is evaluated at each monthly SAIOH Management Board and quarterly Council meetings.

Ethics

Noteworthy is the progression of NGO Law, as they move forward with the legal review of SAIOH's ethics policy and procedures.

Following the initial input and additional questions received, contact has been made to obtain necessary quotes. This development is time-sensitive, as it enables the Ethics Committee to commence its role.

The ethics plan holds significant importance within SAIOH's overall strategy (#3), emphasising

its vital role in achieving key objectives.

Please note: From 1 January 2023, all SAIOH certified members are required to provide proof that they have completed an acceptable occupational hygiene ethics training course. A one-year phase-in period was allowed during 2022.

Terry McDonald of BOHS presented PDCs during the 2021 and 2022 Annual Conferences and on 25 July 2024. These online seminars are available to purchase.

SAIOH Branch activities

The Western Cape branch has had two on-line meetings. Patrick Baleseng (Chair of the Botswana Association for Occupational Hygiene (BAOH) did a presentation on occupational hygiene in Botswana and the upcoming SAIOH-BAOH conference in Gaborone. The Western Cape's new Branch committee was elected with Vuyiseka Zikolo the new branch chair. We welcome Vuyiseka to the SAIOH family.

The Gauteng branch hosted their third meeting in September. Topics presented at this meeting included "Mechanics covered in hexavalent

chromium" by Chris Warnick (USA), and "Life of an occupational hygienist living and working in Europe (Netherlands)" by Elaine van der Nest.

The Botswana branch (BAOH) met on 12 August 2024 with the BAOH team meeting regularly regarding their involvement in the organising of the SAIOH 2024 Conference in Gaborone on 21 – 24 October 2024.

Unfortunately, the Central (Free State and Northern Cape) and the Mpumalanga branches remain inactive.

International Occupational Hygiene Association (IOHA) and Occupational Hygiene Training Association (OHTA) feedback

The Occupational Hygiene Training Association (OHTA) and IOHA continue to publish their newsletters. Links are e-mailed to all SAIOH members and published on the SAIOH website: www.saioh.co.za.

The SAIOH's National Accreditation Recognition (NAR) re-accreditation was due in September 2024. The SAIOH Professional Certification Committee worked hard to compile the required re-application motivation with all the necessary documentation and SAIOH's re-accreditation has been submitted for evaluation.

SAIOH's IOHA representatives, Deon Jansen van Vuuren and Corlia Peens met with the National Accreditation Recognition Committee (NARC), where they did a presentation on SAIOH's certification and registration system, and a second meeting to discuss SAIOHs re-application.

IOHA had a Governance Meeting in September where the draft IOHA Strategy document for 2026 – 2030 was discussed.

The next IOHA Board meeting will take place in Kuala Lumpur on 20 October 2024.

SAIOH Technical Committee feedback

The SAIOH Technical Committee's research on welding fumes, the measurement, and the analyses there-of, was brought to life by Dr Ivan Niranjani, the SAIOH Technical Portfolio co-ordinator.

A SAIOH sub-committee and the OH AIA Association met to develop a technical and position paper on this topic. The final position paper is due early 2025.

Our second technical committee started developing technical procedures and a SAIOH position paper on heat stress management. A setback occurred with the death of Schu Schutte, but I am consulting with the CSIR and Dr Johan Kielblock to do the necessary research. The d-date is early 2025.

The focus remains two-fold, to develop a



technical paper, and to enable SAIOH to provide comprehensive and relevant proposals to strengthen the launched Physical Agents Regulations (PAR - the old Environmental Regulations for Workplaces).

Wessel van Wyk the previous technical co-ordinator is still involved in finalising a position

paper on real-time monitoring. As soon as this receives the green light from the SAIOH PCC Exco's sub-committee and technical committee, it will be circulated to all SAIOH members and stakeholders.

Communications

SAIOH publishes its newsletter/Presidents' page in two electronic media formats, namely the African OS&H magazine (A-OS&H), and the Occupational Health Southern Africa journal.

Volume 30, Special Issue 1, 2024, commissioned by AUDA-NEPAD to publicise the completion of its groundbreaking SATBHSS project and represents a

prestigious milestone in the history of OHSA. Congratulations to Norman Khoza and his team.

The OHTA - Global Link and IOHA Gems newsletters are published on the SAIOH website and distributed to all members via Mailchimp upon availability.

From the Professional Certification Committee (PCC)

Lee Doolan: SAIOH PCC administrator, e-mail: lee@saioh.co.za

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

Corlia Peens: PCC chairperson, e-mail: corlia.peens@sasol.com

Certification assessments

A summary of results for the assessments that took place for the period mid-March to July 2024 is provided in Table 1

ASSESSMENT RESULTS – WRITTEN AND ORAL				
Certification Category	Total Assessed YTD	Passed YTD	Failed YTD	Pass Rate YTD
OH Assistants	109	107	2	98.2%
OH Technologists	67	34	33	50.7%
Occ. Hygienists	27	13	14	48.1%
TOTAL	203	154	49	75.9%

PCC activities

The subcommittee charged with revising the skill set and self-assessment tool is persistently meeting on a bi-monthly basis. Following significant progress, the 17 occupational hygiene skill sets are now fully developed. The committee's attention is

now focused on creating scenario-based questions that align with the requirements of the skill set modules. These questions will be utilised in the oral assessments, ensuring a comprehensive evaluation of candidates' competencies.

Occupational Hygiene Skills Forum (OHSF)

One of the OHSF functions is to evaluate applications from tertiary institutions for recognition of their occupational hygiene-related qualifications. The OHSF is progressing well with these accreditations and is currently in the final stages evaluating the Cape Peninsula University of Technology's (CPUT) occupational health qualification.

All tertiary institutions that offer occupational hygiene qualifications are encouraged to contact the PCC administrator for information regarding application for recognition: lee@saioh.co.za

Details of recognised training providers and recognised qualifications are available on the SAIOH website (www.saioh.co.za), making it easier for students and certification candidates to select suitable occupational hygiene training programmes that meet SAIOH and international certification requirements.

Dr Hennie van der Westhuizen assisted the OHSF in developing questions based on articles in the OHSA journal to allow members to earn CPD points and ensuring more active involvement in the Journal. SAIOH is ready to launch this initiative.



Challenges of compliance management: A case study at the railroads



Dr Bill Pomfret has over 50 years of experience as a safety consultant working for leading companies around the world. Dr Bill is a passionate advocate for safety training.

Compliance management is becoming more challenging. Not only are legislators and governments around the world imposing more regulations, but the expectations placed on compliance is growing every day.

The periphery of compliance – including ethics, diversity, ESG, and risk management – ask for compliance leaders who are seeking to best manage, scale, and address compliance demand efficiently and effectively.

Compliance management aims to ensure that an organisation is aligned to and conforms to applicable laws, regulations, standards, and policies. Yet, the best compliance programmes do more than just align an organisation to the letter of the law or specific legal requirements.

They demonstrate that an organisation is well-run, ethical, can be trusted by its employees, customers, partners, community, and regulators. When compliance programmes are seen as being responsible and committed to the organisation beyond its sofa regulations, they become a vehicle for sustained growth and profitability.

Holistically, an organisation's compliance programme helps facilitate and represent the organisation's workplace culture, values, and reputation, as well as its broad business risks.

Non-compliance and its potential to harm relationships with employees, partners, customers, and the market is a significant risk that should be part of an organisation's risk management approach.

In an increasingly volatile world, best practice necessitates increased data sharing, centralised management, and programme performance measures and accountability.

MISSION, VISION, AND VALUES

For the past 10 years, I have been a director of Moose Consortium, with responsibilities for OHS&E. I drafted our mission, vision and values statement as the first step to be signed by every member of the board.

Mission

The mission of Moose is to create valued solutions for both customers and shareholders of the National Capital Region of Canada, to create valued solutions for rail industry challenges using our people, processes, and technologies, and deliver operational and service excellence.

Values drive our actions and identify the behaviours and ideals we believe are important to the success of our company. We embrace three primary values:

- Results:** We deliver on our promises to create value for the passenger rail industry through talented people, good ideas, business leadership and great technology.
- Collaboration:** We collaborate with our teams and our customers to get the job done, respecting individual ideas and contributions, and moving forward in pursuit of shared goals
- Service:** We serve the changing needs of our customers and our industry to enhance the value they bring to our community, the environment, and our economy.

Vision and values

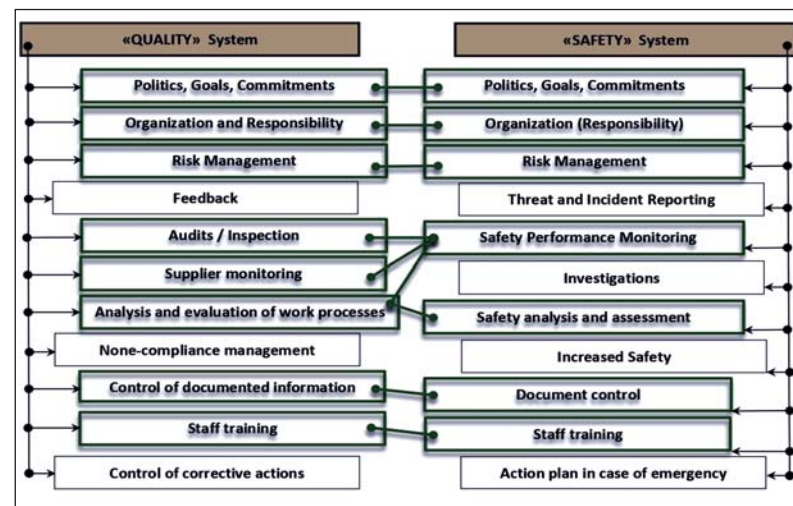
The vision of Moose is to provide transportation services that consistently meet our customers' expectations.

A vision statement is only as good as the people who work to bring it to life each day. To live our vision, employees embrace a set of shared values:

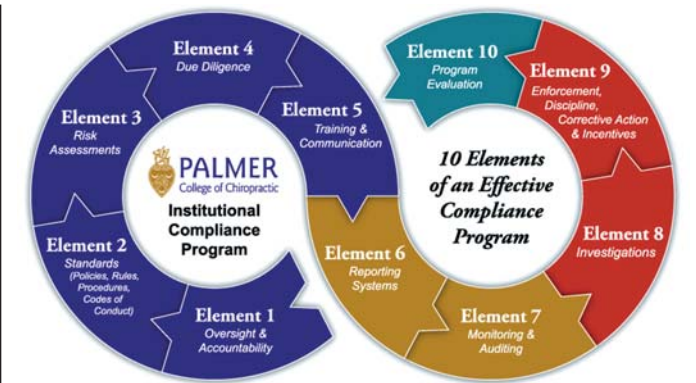
- Listening to customers and doing what it takes to meet their expectations
- Empowering one another, showing concern for colleagues' well-being and respect for their talents and achievements
- Continuously improving by striving to do the right thing safely and efficiently

Success in living our vision and values is evident when we fulfil the highest expectations of our four key stakeholder groups and when:

- Our customers find it easy to do business with us as they receive 100 percent on-time, professional service, accurate and timely service, and the best transportation value.



- Our employees work in a safe and secure environment, are focused on continuous improvement, share in the opportunity for personal and professional growth available to all team members and take pride in their company.
- Our owners earn financial returns that exceed other railroads and the general market because of our superior revenue growth and operating ratio and a return on invested capital that is greater than our cost of capital.
- The communities we serve benefit from our sensitivity to their interests and to the environment, our adherence to the highest legal and ethical standards, and our participation in community activities.



AN EFFECTIVE ETHICS AND COMPLIANCE PROGRAMME

Successful businesses need to be proactive in terms of establishing compliance controls and processes, defining accountability, and centrally managing compliance programmes so that they are easily accessible to all stakeholders.

Being proactive also requires compliance professionals to collaborate with other departments – risk management, legal, HR, and audit – to best manage compliance processes, controls, templates, and timelines. This approach gives the compliance team comprehensive visibility into organisational compliance performance and requirements and the ability to perform regular or ad-hoc assessments to minimise violations and enforcement actions.

ADOPT AND COMMUNICATE AN ETHICAL PROFILE

The foundation of an effective ethics and compliance programme is a strong and well-communicated code of conduct, which may closely represent organisational standards, values, and culture through core policies, procedures, and behavioural expectations. To help ensure applicability and commitment, local cultures, customs, and sensitivities must be taken into consideration.

Automated tools can add further value by simplifying the process of policy development, approval, distribution, attestation, and management.

TRAIN EMPLOYEES ON COMPLIANCE POLICIES

Organisations cannot fully comply with regulations if its employees do not follow organisational policies and procedures. Investing in employee training is a best practice – even if this means multiple training courses. Employees need to understand new laws and regulations as well as commit to the organisation's culture and its ethical boundaries, and compliance requirements.

Technology plays an important role in the creation, legal alignment, learning management systems, tracking, and validation of ethics and compliance training.

INTEGRATE HOTLINES

Many organisations have made whistleblower hotlines available to employees to enable them to report ethical and compliance concerns, including unethical behaviours, harassment, corruption, fraud, discrimination, and any other misconduct.

In the United States, any publicly traded company is required to have a hotline in place, as well as the compliance management tools necessary to manage investigations, review and close cases, and to transparently demonstrate enforcement.

ADOPT A RISK-BASED APPROACH

A risk-based approach to compliance and ethics management involves identifying, scoring, and surfacing high priority risks within the organisation.

As a best practice, risk-based compliance programmes enable organisations to capture, consolidate, and centralise risk management based on standards, controls, and measures.

By applying a risk-based approach across the business, GRC professionals can both showcase best practices in spotlighting the most severe compliance risks from across the business and demonstrate actions taken to actively reduce issues, violations, investigations, and fines.

Most hotlines enable anonymous reporting and follow-up, and triangulate reporting and data. Integrating hotlines with the company's compliance programme is a best practice – even where it's not legally required. Employees must be assured of a responsive and non-retaliatory approach to their reporting.

CONCLUSION

Few organisations can comply with rules and regulations overnight while adapting to a continuous stream of new regulations.

Through exceptional compliance programmes an organisation will express its values and commitment to ethics. A strong well-run compliance programme will pay both qualitative and quantitative dividends.

A pound of prevention:

Good advice for the petrol-heads and weekend mechanics

This article by Bill Locke, was published 40 years ago in a Classic Car Club of America bulletin and republished from the Safety First Association's SA. Family Safety Guide, of Autumn 1984. It has been re-submitted for publication by Leighton Bennett, Chairman Safety First Association as it still has relevance today

As I sit here with a patch over one eye (because of a flake of scale that flipped into it while tinkering), it seems appropriate that we devote this month's sermon to safety as it applies to the casual classic car mechanic. The eye is okay; as a matter of fact, it hurts less than the seat of my pants where I've been kicking myself for being so stupid as to let my eye get injured.

EYE INJURIES

Let's start with the eyes. You can't drive your "old clunker" without them, so you'd better protect them. It has to be obvious that grinding or drilling demands the use of safety glasses. Less apparent, maybe, is working on exhaust systems or hammering where chips can fly.

Experience has shown that factory workers cannot be relied upon to use their judgment regarding their need for safety glasses for a particular chore. The rule is that any operation that can possibly throw debris of any sort requires eye protection. Because individuals find it hard to adhere to that rule, most factories require eye protection for all activity. That would be a good guideline for all of us.

For people who wear glasses, the use of safety glasses at all times is not much of a hardship. Those who don't wear glasses have a psychological obstacle to overcome to get into the habit. Do it anyhow. Get some safety specs and wear them every time you go through that garage door.

FINGER PROTECTION

Next subject - fingers. Some time ago, while working in an experimental shop, I checked the alignment of a spring eye and spring hanger by slipping a finger in the hole prior to slipping the spring pin in place. The boss saw me do it and immediately launched into a tirade about the possibility of the spring slipping which could result in me losing a finger. In my defence against his attack, I meekly responded that I really usually follow safe practices. But suddenly the fixture beside us slipped and the spring slipped out of its hanger. The boss stopped his lecture, his point having been made, and oh so clearly. I just stood there with goosepimples - mad because I had been so dumb, and scared because of how closely I had come to losing a finger.

The purpose of recounting that incident is to convey to you a lesson that was taught to me very vividly. Take careful note and don't ever allow your precious digits to find themselves in any potential cutting, shearing or crushing situation. They're

going to get enough beating in other ways, but they'll heal from those. One can't heal what isn't there!

TOE PROTECTION

Your other extremities are useful too, like toes. Industry recognises the need for steel-tipped shoes. I'm sure each of you can recall a mighty sore toe, and chances are mighty good that a safety shoe would have avoided it. I don't advocate spending your time in the shop wearing a suit of armour, but safety shoes and safety glasses yield a good return for the inconvenience.

CONSEQUENCES OF MISUSE OF JACKS

Our company manufactures jacks and lifts for the auto industry and as such we get to see the misuse of those products and the grief caused by such misuse. Perhaps I'm overly sensitive on this subject because of it, but it just terrifies me to see someone underneath a car supported only by a jack. This is especially dangerous with a bumper jack and worse, lifting a rear corner than a front corner. Even heavy commercial jacks shouldn't be relied on to support a car while you're underneath. Many mechanics get squished because a jack slips or is inadvertently released. Always, always, always use a jack stand or blocks or some backup for the jack. At the very least, a second jack.

A hint: If you see a building under construction, stop and ask for the scraps of the treated 8-by-8 (about 200mm) corner posts. These make wonderful blocks to put under the frame, and they don't rot. Bricks and cinder blocks tend to crumble, especially under impact and therefore shouldn't be used.

Cars do fall from jacks and the consequences are severe - and there is no reason to run the risk. I religiously follow the rule of never getting under a car supported by a jack and I refuse to be around anyone working under those conditions. I dread those screams.

CORRECT USE OF HAND TOOLS IS VITAL

Certainly, of less consequence is the category of misuse of hand tools. The pounded thumb, the skinned knuckles are identification marks of the weekend mechanic. Although the body can put up with a lot of that sort of thing, it isn't fun and a few precautions will minimise their occurrence.

Hand tools wear out: when they do, throw them away. Worn open end wrenches are sure to skin a knuckle. When you get the new one, throw the old one away or else you'll use it and be right back where you started. I'm Scottish enough that it's



difficult for me to heed my own advice on this, but I can show you some scarred knuckles that indicate I should.

Always use the proper tool. A good fitting screwdriver rarely slips. The correct sized socket won't round corners. Don't use pliers on nuts, screwdrivers to pry, hammers to press, screwdrivers to chisel. Besides stripping the tools, these practices often leave a little piece of hide on a nearby edge.

Avoid sharp edges where possible. When you make a part or drill a hole, take the time to break the sharp corner. When you find a corner or burr that could cause trouble, take a minute to hit it with a file or grinder.

When using tools around your car, keep in mind the possibility that the tool could slip. I've socked myself in the jaw with breakover handles, delivered George Foreman uppercuts to sheet-metal, and a whole other series of equally foolish, and dangerous manoeuvres. I have learned to accept the possibility of such accidents happening, but now I plan for them. I wear the correct gloves and pad my possible impact areas. My percentages of being hurt are now much better. Learning how to prevent, will save much wear and tear.

FIRES AND EXPLOSIONS

This is a big one with no excuses acceptable. All of us have heard about fire prevention since kindergarten, and most of us know the possible causes and what to do. Strangely, in spite of all this, many don't even take the basic precautions. Anyone reading this who doesn't have an adequate, serviceable, accessible fire extinguisher within eight metres of his Classic is guilty. It's just good sense! The frustration of watching a fire that you can't put out is bitter and unnecessary.

Using an open container of petrol inside a building is wrong beyond description. There is no justification for it under any conditions.

The greasy rags in the corner can catch fire all by themselves, just like we've been told. And because they haven't yet doesn't mean that they won't.

As for the smokers, you need to take extra care. I don't need to identify the flammables that can be

found in a garage; they are many and each is tinder for the lighted match or smouldering cigarette. The best policy is to smoke outside and when you're visiting someone else's garage - don't smoke!

Special tools require special fire caution. I'm asking you to learn from reading this article - not like me. It seems, I need to be pounded over the head to learn.

My special-tools-and-fire story involves using my arc welder on some car parts. I was progressing well until I smelled cloth burning which prompted me to stop welding and raise my mask. At the same time I suddenly felt burning and was astonished to find my socks on fire. My neighbours still laugh about me sitting in front of the garage pouring a bucket of water on my burning socks. It's a scene out of a comedy movie, but does have serious overtones. I learned to wear boots when I weld.

ELECTRICITY CAUTION

A proper respect for electricity is a must in our weekend shop too. The power of a car isn't going to get you, but those 220 volt tools that you use can. Grinders, saws, drills, sanders, extension cords, welders, battery chargers and even lights need good wires, good earth and careful use. Don't tolerate a frayed cord, don't use ungrounded (unearthed tools, unless they are double insulated) especially when it's damp. The fact that your drill never "bit" (shocked) you before (little pun there) does not mean it won't the next time you plug it in.

DRESS APPROPRIATELY

Rags and loose clothing can get tangled in a power tool. Even a small 6mm drill can develop a dangerous stranglehold if it grabs a loose piece of clothing. Bigger tools, of course, pack a bigger wallop. I really don't advocate working without clothes; however, good judgment should prevail in the clothes worn.

CONCLUSION

The list goes on, manual handling, lift with your legs, not your back. Use care with solvents and acids. Watch out with paints and heaters; etc. We can't discuss them all, and you've heard it before.

Consider though that we independently thinking people are slow to voluntarily do things that we know we should. It takes a conscious effort to make safe practice a habit. I can recall when the plant first required safety glasses in shop areas. At first I had to be told and reminded to wear them. You owe it to yourself to develop those habits even in the comfort of your own garage.

That's it for now but please take heed and don't put this down and say, "by golly, Locke has some good ideas there". Rather, resolve to follow these guidelines. If these comments save one broken bone, they're worth this space.

Is ergonomics a system?

A case study: A meat inspector working in an abattoir



Shaun Ramroop is the Head of the Department of Environmental Health at the Nelson Mandela University, Gqeberha. He has over 30 years of experience in Environmental and Occupational Health and Safety and has worked both in the public and private sectors. His research focus is in the area of human factors/ergonomics (HFE).

ERGONOMICS IN THE WORKPLACE

When ergonomics is applied in the workplace there are two important points of departure, which both rely on an understanding of human abilities, capabilities and limitations, and challenges.

Firstly ergonomics aims at providing the guidelines according to which machines, tools, work and work procedures are to be designed, used or developed. This speaks to the application of ergonomic principles in the development of ergonomic-related specifications and guidelines, which consider human capabilities and limitations, to ensure that these products or equipment are designed for effective, efficient and safe use of the operator. This is a proactive approach to effective ergonomics. Therefore, to ensure good ergonomics, use is made of standards, guidelines and research findings.

The second role of ergonomics is reactive. This relates to the development and use of ergonomic-related criteria. These criteria are then applied to assess whether existing products comply with ergonomic requirements to ensure OHS and efficiency.

The most common and basic ergonomic assessment tool is the “Ergonomic Checklist”. Ergonomics cannot be understood or applied if one does not clearly understand the most fundamental point of departure in the application of ergonomics.

Ergonomics centres on catering for the human capabilities and limitations in the human-machine systems (Schoeman & Heever, 2015). When ergonomics focuses on the man-machine system, a fundamental challenge arises when a system is adapted to fit the man, that is fitting the task to the human and not the human to the task. Such an approach to ergonomics in the workplace is not supported, because a holistic, multidisciplinary approach is not followed.

BENEFITS OF ERGONOMICS

In the dynamic world of South African businesses, fostering a work environment that promotes employee comfort and well-being is a strategic investment that pays significant dividends. One such investment that is often overlooked is ergonomics.

Below are a few benefits if good ergonomics is practised in organisations:

- Ergonomics reduces costs. By systematically reducing ergonomic risk factors, costly musculoskeletal disorders (MSDs) are prevented.

- Good ergonomics in the workplace reduces the high cost of workplace discomfort.
- Productivity is boosted, as the best ergonomic solutions will often improve productivity.
- Ergonomics improves quality.
- Ergonomics improves employee engagement.
- Ergonomics creates a better safety culture.
- Employee satisfaction is enhanced.
- Health-related costs are reduced.

Implementing good ergonomics in the workplace is not always easy as several obstacles can arise during the implementation phase.

Below are a few examples of obstacles that can arise in any organisation:

- Cost and budget issues.
- Resistance and attitude to change.
- Complexity and diversity.
- Regulations and standards.
- Technology and innovation.

ERGONOMICS WITHIN THE SOUTH AFRICA CONTEXT

Research in the field of ergonomics is scarce, however, over the last few years an interest has arisen from students from an array of schools and faculties to study ergonomics.

The Occupational Health and Safety Act, 1993 (no 85 of 1993), governs health and safety practices in the workplace. Section 16 of this Act, charges every chief executive officer with the duty “to provide and maintain, as far as reasonably practicable, a working environment that is safe and without risk to the health of his employees” (Republic of South Africa, 1993).

The Ergonomics Regulations, 2018, has also provided the country with a specific set of regulations to manage ergonomics in the workplace. With the promulgation of these regulations, there has been a greater awareness of ergonomics and more employers are taking the risks associated with poor ergonomics in the workplace much more seriously.

It is also important to mention that, since the promulgation of the Ergonomics Regulations in December 2019, there have been several challenges with their implementation. However, the Department of Employment and Labour (DoEL) has addressed these and is working on further ways to promote ergonomics in the workplace. DoEL has also drafted and published guidelines on the

regulations that promoted a team approach when conducting risk assessments, as it is beneficial to draw on the knowledge and skills of others in the workplace and other professions.

The basic premise of ergonomics is that it deals with the human-system interface. As with other design-related disciplines, ergonomics includes specifications, guidelines, methods, and tools.

Ergonomists use these for several functions including improving quality of life (health, safety, comfort and usability) and productivity. This approach to ergonomics is of a Western paradigm and focuses on industrial hygiene and has emerged from a long process.

According to Elgstrand & Petersson (2009), the industrial OHS paradigm’s focus is: the health of workers should be promoted, prevention is the preferred action, the employer has the main responsibility, workers and government should cooperate with the employer to achieve OHS and, injured and diseased workers must be rehabilitated.

Unfortunately, ergonomics in the 1st and 3rd world fits into this Western industrial OHS paradigm. This paradigm is increasingly being contested due to the major changes that the world is experiencing i.e., climate change, failures and constraints, development of production and work organisations, the restricted application of the OHS paradigm and political developments.

Therefore, a new paradigm is needed and Elgstrand & Petersson (2009) propose a social OHS paradigm. At a macro level, this paradigm must consider the following: rethinking justice, developments in the workplace, traditional participative approaches to workplace management, cultural change and a social paradigm. Only time will tell what such a shift will mean for the discipline of ergonomics.

ERGONOMICS SYSTEMS ANALYSIS

Background and overview of the SEIPS model

In the past 15 years, Systems Engineering Initiative for Patient Safety (SEIPS) and related

conceptual models were developed to study and improve healthcare. The SEIPS model is a theoretical model rooted in human-centred systems engineering or ‘human factors/ergonomics’.

All versions of the model depict three major components, the work system, processes and outcomes; key characteristics or factors of each; and how the components affect one another.

The SEIPS model has been used to understand or design sociotechnical systems and has supported evaluation, planning and research activities.

The three major SEIPS components are represented by unique shapes, work systems (square); work processes (triangle) and work outcomes (circle). Figure 1 illustrates the three major components of the SEIPS model.

According to Holden and Carayon (2021), work systems are comprised of interacting structural elements that together produce performance. Every working system minimally has the components of people, environments, tools and tasks (PETT).

The primary role of the SEIPS model in HFE systems analysis is to enumerate, describe and evaluate tasks and tools, often to design or redesign them or to identify gaps between the tasks performed and the tools available.

WORK SYSTEM DESIGN FOR MEAT SAFETY, THE SEIPS MODEL, AND ITS APPLICATION IN AN ABATTOIR

This article describes how the SEIPS model of work system and patient safety can be used in an abattoir setting.

Meat inspection in South Africa

In South Africa, all meat is inspected by meat inspectors who work at abattoirs. Meat inspectors are trained Environmental Health Practitioners (EHPs) who specialise in food i.e., meat safety. They have to operate independently from an abattoir and ensure that the requirements for ante-mortem and post-mortem inspections are complied with in terms of applicable legislation.

The meat inspectors who works in modern abattoirs face several stresses. Extended working hours, adoption of awkward body postures, lifting, heavy manual work, and repetitive work are some of the hazards. Such conditions contribute to the high prevalence of ergonomic hazards within abattoirs.

In a study that was conducted in New Zealand, Tappin et al. (2008) recognised that the highly paced working activities, no job or task rotation programmes, performing physically demanding tasks, inadequate space resulting in awkward postures, knife sharpness, no rest, inadequate design, poor layout of equipment and facilities contributed to the prevalence of ergonomic hazards in abattoirs.

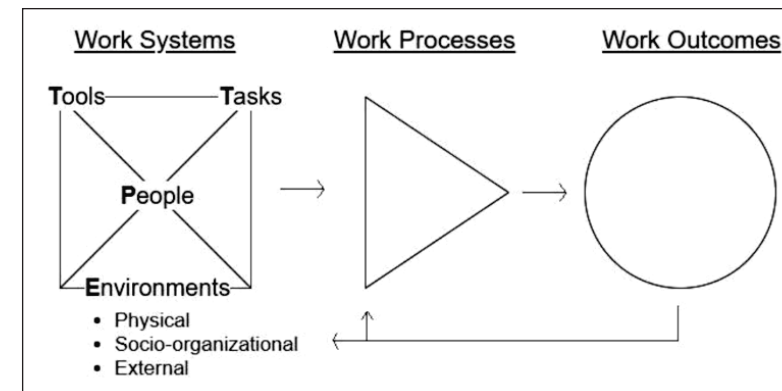


Figure 1, Major components of the SEIPS model (Holden & Carayon, 2021)

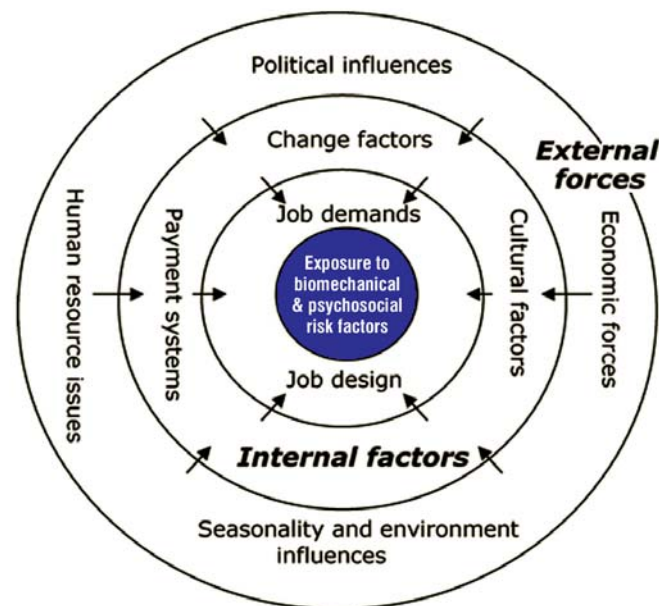


Figure 2: Conceptual model for the role of contextual factors in meat processing musculoskeletal disorders (Tappin et al., 2008)

Figure 2 illustrates the conceptual model for the role of contextual factors that affect the meat inspector resulting in musculoskeletal disorders (Tappin et al., 2008).

Most errors and inefficiencies in meat inspection arise not from the solitary actions of the meat inspector but from conflicting, incomplete, or suboptimal systems of which they are a part and with which they interact i.e., conducting meat inspections in an abattoir.

Meat safety recognises the need for human factors engineering and systems approaches to effective and efficient meat inspections, analysis, and improvement.

The meat inspection process

- Meat inspection is designed to determine the health of animals both before death (ante-mortem) and after death (post-mortem).
- In South Africa, all meat should be inspected by law before consumption.
- Meat inspectors working in abattoirs, and who are overseen by a veterinarian conduct such inspections.
- The meat inspector performs the inspections in abattoirs, but a Veterinarian is called in, only when a further diagnosis is required.
- All domestic animals going into the food chain are inspected before harvesting (ante mortem).
- Some of the inspection methods are:
 - * Observing the animals' behaviour that may indicate any signs of disease
 - * Isolating animals that show signs of disease, illness, or injury

- * Verifying animal identification records and tags
- * Overseeing the humane treatment of animals during herding and slaughter
- Following harvesting, animals are inspected by the Meat Inspector.
- In the case of beef, inspectors examine the following:
 - * Head, an array of lymph nodes near the tongue, and the tongue itself.
 - * Esophagus and spleen.
 - * Lungs and heart.
 - * Bile duct and liver.
 - * Other accessible carcass lymph nodes.
 - * Diaphragm and kidneys.
 - * Carcass internal and external surfaces.
- Lamb, pork, and poultry carcasses receive similar inspections that focus on the particular species and associated health issues.
- Some of the hazards that may occur during the slaughter process are:
 - * Contamination of the carcass during the removal of the hide and digestive tract.
 - * Cross-contamination during the splitting of the carcass.
 - * Bacterial growth during the chilling and ageing of carcasses.
 - * Cross-contamination from specific animal tissue that is at high risk for disease, such as Brucellosis, and specified risk materials (SRMs) (e.g., spinal cord, brain).

KEY CONSIDERATIONS AND INTERACTIONS IN THE SEIPS MODEL

The interactions in the abattoir setting between the meat inspector and the environment are multi-dimensional. Various types of interactions can take place at various levels.

Below are examples of interactions and the consequences that can arise from them (not exhaustive):

The individual (meat inspector)

- If the person is stressed or fatigued, this might lead to accidents in the abattoir.
- If the person is paid a salary that is not attractive, this might lead to low morale, resulting in poor job satisfaction.
- If the person is very intelligent, the simple and routine task of inspecting meat can result in boredom.
- Cultural diversity in the abattoir could result in miscommunication between the meat inspector and other workers, and also the interpretation of safety signage (pictograms).

- An unfit person will ultimately experience, pains, aches, MSDs, and will not be able to keep up with the line speed and the pace of work.
- If the worker is not acclimatised to the internal abattoir environment, heat exhaustion could result.
- Poor eyesight could lead to the workers injuring themselves whilst making incisions on the carcasses.
- Incorrect buttons could also be pressed, due to colour blindness and poor eyesight.
- Using incorrect tools would lead to strain on the body.

Organisational

- Incorrect staff ratios will result in work overload.
- Poor organisational culture.
- Low salaries are being paid to the meat inspectors.
- Lack of transformation in the abattoir.
- Poor OHS management systems.

Environmental

- Incorrect abattoir layout could result in accidents.
- Insufficient space will create uncondusive working conditions.
- Incorrect platform heights could cause MSDs.
- Air, water, noise and land pollution.
- Poor or incorrect lighting and ventilation.

Task

- Poor tool design, impacting the grip for knives.
- Knife sharpness affects task performance.
- Stretching or reaching to perform tasks.
- Performing tasks with arms in an elevated position.
- Repetitive tasks.
- Lifting.
- Pulling and pushing.
- Physically demanding tasks.
- Long hours.
- No rest or recovery breaks.
- No job rotation.
- Awkward stances or working postures.
- Fast activities.
- If insufficient training is supplied on tools and/or technology used, or on stressors present in a work area.
- Insufficient training may lead to an employee not performing work correctly and/or not using tools and technology as intended.

- An employee who is not aware of the risks and hazards present in a work environment may put himself and others in danger. For example, if a worker enters the freezer rooms without the proper personal protective equipment, knowledge and training, it can lead to injury or even death.
- Medical surveillance forms an important part of the improvement of worker health and well-being.
- When working in very hot environments, regular breaks in a cooler area need to be encouraged.

CONCLUSION

The primary aim of ergonomics is worker wellness, which cements the proposition that ergonomics must indeed adopt a multi-disciplinary approach to become a value proposition going forward.

The human-machine system for a meat inspector in an abattoir is discussed, and the details of the ergonomics in that workplace are provided. Several benefits of ergonomics are provided and the current and future paradigms of ergonomics in South Africa are discussed.

The ergonomics systems analysis is thereafter undertaken with a background of the SEIPS model. The application of the model to a meat inspector working in an abattoir is provided.

Thereafter, the key considerations and interactions with the meat inspector and abattoir are outlined.

This article has, therefore, attempted to provide a position for ergonomics to follow a multidisciplinary and systems theory approach. The use of the SEIPS model as a robust tool to analyse any working system is demonstrated, by using the model to evaluate a meat inspector in an abattoir. The SEIPS model as a level one assessment tool can be used in any workplace to analyse any working system.

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THE FUTURE OF THE EMERGENCY SERVICES challenges in keeping up with the modern era

The Safety First Association hosted the EMS/Fire Safety Conference from 21-22 October 2024 at Dräger's Auditorium in Buccleuch.

The event was attended by over 70 people with 22 presentations. The Safety First Association thanks all sponsors: Fire Ops SA, SkillsTrain Distribution, Industrial Fire & Hazard Control, Sysman, ETS, FPASA and Bidvest.

The SFA will be hosting another event during 2025. For further information, email debbie@safety1st.co.za



Leighton Bennett Chairman Safety First Association (SFA) opened the conference and introduced the SFA which has been a mouthpiece to the OSH industry since 1932.



He thanked Dräger for the use of their auditorium.

Leighton also gave an informative presentation titled "The blame game - don't ignore fire hazards".

Jonathan De Villiers (below), keynote speaker. *Navigating the emergency services to success during current difficult times.*



Right: Theresa Geldenhuys: *SAESI - past, present and plans for the future*



Left: Moshema Mosia *Wildland/urban interface & climate change*



Inspections, compliance and fire fighter competencies in the 21st century - Tibor Szana



Privatised fire services - a necessity in today's age or just a nice-to-have? - De Wet Engelbrecht



Improving medical emergency efficiency through Apps and emerging technology - Saul Behrmann



Key take-aways from recent court hearings: Implications going forward - Wynand Engelbrecht



The first responder vs The fire investigator - Saritha Wolff



Team building through employee wellness - Riaan Janse van Vuuren



Recognising and managing first responder burnout - Lizelle De Villiers



Modernisation of the emergency services - Louis Pretorius



Containing lithium fires - Duncan Boyes



Implement effective risk assessments: Save more than lives - Marius Atterbury



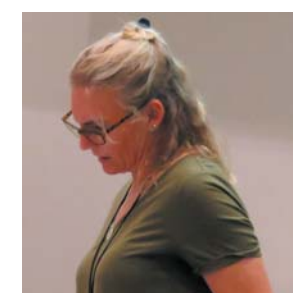
Training and building winning teams for USAR effectiveness - Thabo Charles Mabaso



From prediction to response: AI's critical role in fire fighting and fire prevention - Linda Botha



Understanding IFSAC: What you need to know - Chris Gilbert



From first aid to frontline: The evolution of EMS training - Debbi Groome



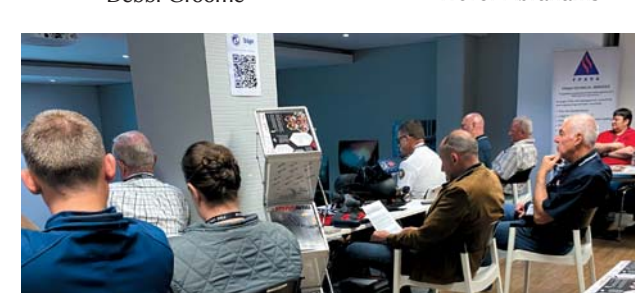
Climate change and wildland fires: A potential catastrophe - Trevor Abrahams



The transition to non-fluorinated fire fighting foams - fraught with challenges - Trevor Fiford



Public Education (PIER) - Hendrick Sibara

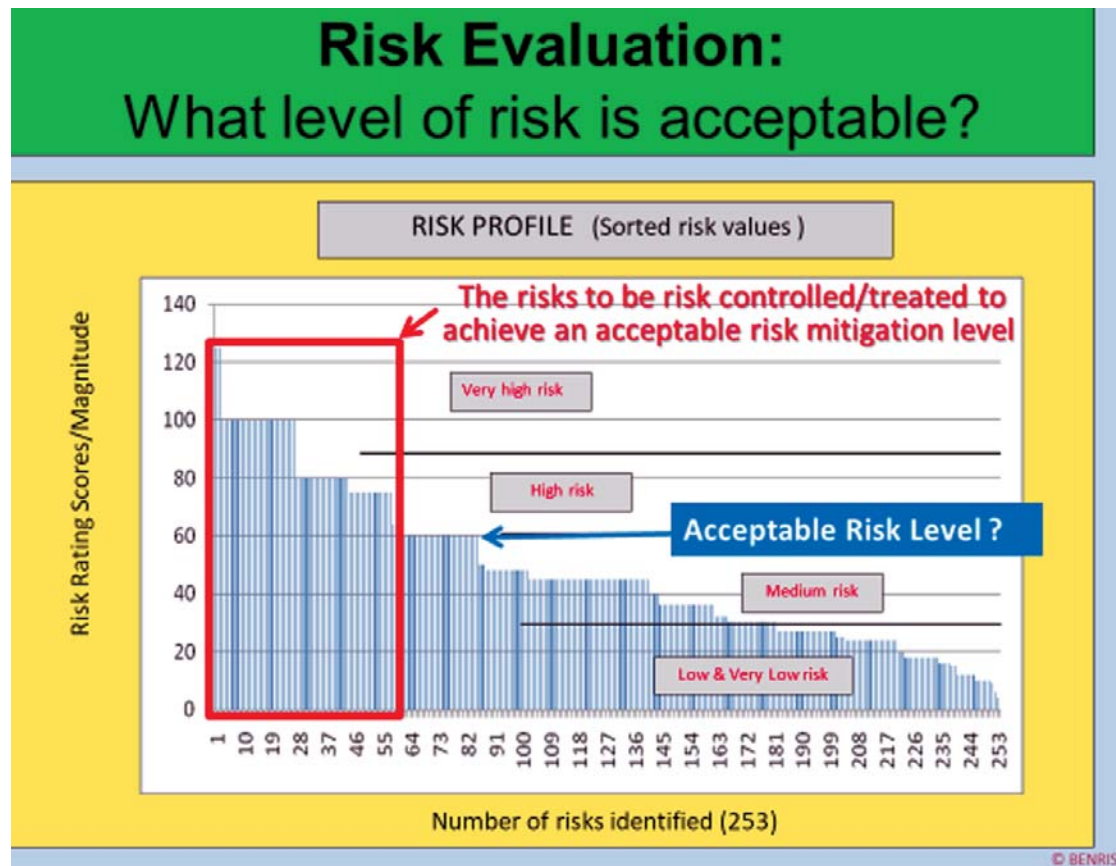


Unable to attend in person, Roland Hendricks gave his presentation virtually: *Strategic Roadmap 2030: Shaping the future of the fire services - Roland Hendricks*

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