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Published alternate monthly by Charmont Media Global
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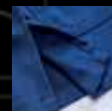


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TELLING STORIES AND CHANGING CULTURES

"CATCH A MAN A FISH AND FEED HIM FOR A DAY. SHOW HIM HOW TO FISH AND FEED HIM FOR A LIFETIME." THAT PROVERB RAN THROUGH MY MIND WHILE ATTENDING THE 2018 SAIOSH CONFERENCE



GAVIN MYERS

Knowledge sharing has to be one of the most powerful human endeavours. This was certainly evident as I listened to the 11 world-class speakers that Saiosh had lined up this year. Each shared lessons from their daily work, knowledge from decades in the health and safety industry, or pertinent information regarding the latest developments that could help make the jobs of their counterparts that little bit easier.

In addition to thought-provoking talks by two of this magazine's columnists – Brett Solomon and Brian Darlington – all the other speakers certainly left a lasting impression. You can read about some of them in this issue, and in issues to come, but I want to specifically touch on two here.

The first was by a larger-than-life character by the name of Ken Annandale. A name well known to the industry and author of *The One Minute Safety Manager*, Annandale told a story – about telling stories – from which most people could learn.

"Everyone has a story to tell ... storytelling is something we've always done and will always do. In the health and safety world we need to tell stories. However, the way we tell these stories is usually uninteresting and leaves people cold," he began.

Annandale noted that all an organisation's people need to be more aware of occupational health and safety...

"Every one of us can change the lives of people. If we can personalise our health and safety stories, and make them real to people, we can reach them on a deeper level," he concluded.

Then there was one of the international speakers, Kevin Robinson of RTMS Global, who discussed the difference between behaviour and culture.

"Does culture influence behaviour, or vice versa? It's a chicken or egg scenario... The definitions indicate that our culture is the root cause of behaviour, but can behaviour not become cultural?" he questioned.

"If we're at work and something happens, how do we respond? Is it an automatic reaction? What if we get a negative response from someone – how do we then respond to them? This is to do with our behaviour," Robinson noted.

He added that, in terms of culture, we could consider anything from nationality, to upbringing, religion, gender or age.

"How do we deal with people from other countries or backgrounds, who are, themselves, working in a different culture – is there cultural sensitivity? We are still seeing the need for change..." he warned.

So what about the need to change an organisation's health and safety culture?

"If you want to deliver change, you have to know what you want to change and have a clear end goal. How will you achieve this and in what timeframe? There must be benefits to changing a culture," he stressed.

So, are you telling the right stories in your organisation? Or do you need a cultural change? These questions all provide food for thought and many organisations would probably benefit from exploring them at a deeper level. **SM**

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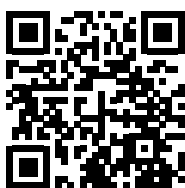


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**SETTING A NEW STANDARD
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MAXIMUM PRODUCTION, MINIMAL INJURIES

Production output in the mining industry is predicated on the smooth functioning of machines, processes and people. Back-to-back shifts are needed to realise full production potential – but it only takes one incident to jeopardise the entire system.

According to Ansell, in 2009 a leading national safety organisation released the results of a study into work-related injuries in Australia. The report specifically outlined the incidences and frequencies of work-related injury among shift workers compared with non-shift workers.

It revealed that shift workers are more likely to be injured, and are more likely to be injured more often. The study found that workers are more susceptible to injury within the first six months of employment. The most high-risk group appears to be those working 30 hours or less per week.

The report suggests that this is not related to a lack of occupational health and safety (OHS) training, which, says Ansell, makes the selection and utilisation of suitable personal protective equipment (PPE) all the more important.

The company claims that hand and wrist injuries represent around a third of all work-related incidents requiring medical intervention in Australia, and that there is significant opportunity for improvement when it comes to implementing policy and processes that will minimise the risks in the mining industry globally.

"While price is always an important factor in PPE purchases, so, too, are quality and suitability for the task. Rather than utilising a glove made of leather, hand protection that has been designed specifically to meet stringent international standards always represents a better option," says Ansell.

"The nature of the task may largely determine the most appropriate selection, but it should never be at the expense of comfort and dexterity, particularly where precision handling is required.

"The advent of cut-protection yarn technology provides

the perfect balance between safety and comfort. Users can choose from a range of alternatives that deliver degrees of protection tailored to specific working environments and the conditions they present.

"Workers are often susceptible to hand fatigue or repetitive motion injuries and subsequent musculoskeletal disorders, so a solution that delivers stress-release functionality offers superior protection. Engineered yarn blends various fibres such as stainless steel, glass and nylon in a process that provides high cut protection with exceptional comfort and dexterity."



The company also suggests that fabrics, coating and knitting technology have all improved significantly in recent years, meaning that the optimum solution for each task is now within reach for those charged with ensuring worker safety.

"In an industry sector (such as mining) that operates around the clock, a degree of downtime due to injury may be inevitable. If it can be minimised through the selection of appropriate PPE, it's hard to understand why safety managers would opt for anything less," the company concludes.



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HELPING TO CREATE THE MINE OF THE FUTURE

Almost two years ago, under the initiative of Professor Frederick Cawood of the Wits Mining Institute, a one-of-a-kind simulated mining operation facility was implemented at the Chamber of Mines building on the West Campus of the University of the Witwatersrand.

The simulation consists of a mine surface area (on the roof of the building), a vertical shaft (using a stairwell), and a mock-up of an underground mine and control room in the basement.

The lab is equipped with digital systems to enable research for the "Mine of the future". The objective is to transfer surface digital technologies into the underground environment, enabling a mine to automatically and remotely observe, evaluate and take action by using technology to enhance protection of mine workers against the typical risks to which they are exposed.

Schauenburg Systems implemented its Mine Wide Integrated Monitoring and Control System (MIMACS) for research at the Wits Mining Institute, exclusively for the DigiMine Laboratory.

Lewis Mathieson, MD at Schauenburg Systems says: "We believe that tertiary education is the key to a better and more sustainable future for mining in South Africa. Schauenburg Systems will continue developing innovative solutions that will, through digitisation, enhance health,

safety and productivity at our mines."

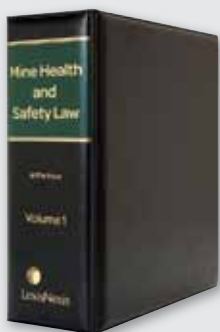
Schauenburg's MIMACS solution addresses multiple safety and productivity concerns within underground and surface mining. Modules of MIMACS implemented at the DigiMine Lab are:

- New-generation cap lamps (PTC Safelite) including wireless and digital communication.
- Portable gas-detection instruments (GDI Sentinel) with real-time digital data downloading capabilities.
- Lamp room and asset-management system.
- Real-time personnel location monitoring.
- Fixed environmental monitoring.

Upgrades and new features to the system are continuously being implemented, and students are trained to monitor and maintain the system under the guidance and supervision of postgraduate researchers, Mosima Matlhwana and Faiz Javaid.



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Mine Health and Safety Law

By WP le Roux

This easy to carry A5 book contains the full text of the Mine Health and Safety Act No. 29 of 1996 and the Regulation. The Mine Health and Safety Act 29 of 1996 and Regulations also contains Regulations derived under the Mines and Works Act 27 of 1956 and the Minerals Act 50 of 1991. (GNR.992 of 26 June 1970). It is an indispensable source of reference for employees, trade unions, employers and employers' organisations. The format is cost effective, comprehensive and convenient.

R2 656.60 (incl. VAT and excl. delivery)

Occupational Health and Safety Law

By WP le Roux, P Colyn

The Occupational Health and Safety Act No. 85 of 1993 and Regulations is published in an easy to carry A5 format. The publication helps to provide for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery. The Regulations in the Occupational Health and Safety book have been grouped into Categories/ Subject Areas that make it easier to navigate through the publication. The Subject Areas are: GENERAL REGULATIONS; HEALTH REGULATIONS; MECHANICAL REGULATIONS; ELECTRICAL REGULATIONS and GENERAL NOTICES.

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HARVESTING ICEBERGS TO SAVE THE MOTHER CITY

Harvesting icebergs was one of the solutions offered to assist with the water shortages in Cape Town. At the African Utility Week Conference, held in the Mother City in May, Peter Flower, director of water and sanitation in the City of Cape Town, told delegates that the City still needs to reduce water consumption (to 450-million litres per day) to keep Day Zero at bay. With the current usage (of 500-million litres per day) the situation remains dire.

According to salvage expert Nick Sloane, the answer to the water crisis might lay buried in icebergs – a total of

140 000 icebergs to be exact – that are drifting in the southern oceans. Harvesting icebergs, he said, could help provide at least 20 percent of Cape Town's water needs.

Icebergs, which contain some of the purest quality water, break off in Antarctica, drift into the ocean and melt away. Sloane noted: "About two-billion tonnes of ice breaks off every year." He envisages these icebergs being captured around Gough Island in the South Atlantic Ocean, and then guided and moored about 40 km off the island of St Helena, where the water could be harvested.

Sloane explained that large saucers would have to be used to capture the melting water. It is estimated this could deliver up to 60-million litres of water per day. By milling the iceberg, this could increase to 150-million litres of water a day, which could be pumped into tankers and ferried to land, where it would be treated before going into the water system in Cape Town.

When asked whether this system would be financially viable, Sloane said: "We are looking into it."

Claire Janisch, director of BiomimicrySA, shared case studies on how nature can be copied to help mitigate the increasing challenges related to natural resources.

She explained that wind turbines can be made more efficient by looking at the attack manoeuvres of the humpback whale, while mangrove trees, which survive on sea water, can teach us something about desalination.

"Solutions to our problems already exist in nature. We can improve our physical world by following nature's example," Janisch concluded.



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ALL-ROUND SOUTH AFRICAN FAVOURITE

TOP INDUSTRY ASSOCIATIONS ALIGN WITH KITE 2019

Continuing education remains a top priority for many businesses in South Africa and provides employees with the opportunity to improve their on-job skills and knowledge. While longer-duration courses offer the most intensive tool for learning, the advantages of shorter seminar and conference sessions should not be overlooked.

The KwaZulu-Natal Industrial Technology Exhibition (KITE), which is being held between July 24 and 26, 2019, at the Durban Exhibition Centre, provides two avenues for knowledge transfer to the industry: the free-to-attend SA Institute of Mechanical Engineers (SAIMechE) seminar and the Lifting Equipment Engineering Association of South Africa (LEEASA) conference.

"Enhancing the visitor experience through value-added synergistic events is a critical success factor for KITE and has proved a major drawcard," says Nick Sarnadas, portfolio director at Specialised Exhibitions Montgomery.

"In fact, our post-show research indicates that a substantial 18,7 percent of all visitors were primarily registered to attend the educational sessions," he adds.

"However, one of the benefits of an event like KITE is that once the visitors are on site, they are prompted to visit the exhibition stands on their way to and from the seminar and conference sessions. The end result is more feet at the exhibitor stands and increased awareness of the technology available at the show."

Sarnadas points out that there is simply no other exhibition in KwaZulu-Natal that can showcase such a variety of diverse industrial technology equipment under one roof. Currently one-third of stand space has been reserved (based on a larger floorplan than that of 2017) and potential exhibitors are encouraged to book early, which will allow them to select the position most beneficial to their needs.

"We continue to grow the physical footprint of the exhibition as new technologies and manufacturing methods are introduced. Feedback from both exhibitors and visitors influences the industrial sub-sectors on which we place increased focus and results in the regular addition of symbiotic business segments," Sarnadas concludes.



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STYLISH, FROM HEAD TO TOE

HSE SOLUTIONS, THE EXCLUSIVE PARTNER OF HONEYWELL PERSONAL PROTECTIVE EQUIPMENT (PPE) IN SUB-SAHARAN AFRICA, BROUGHT ITS STYLISH PRODUCTS TO THE A-OSH EXPO. SHEQ MANAGEMENT LEARNED MORE ABOUT ITS COMPREHENSIVE OFFERING

HSE Solutions and Honeywell combined forces at the 2018 A-OSH Expo, which was held at the Gallagher Convention Centre in Midrand during May. The bright red, open-plan, interactive HSE Solutions exhibit gave delegates an opportunity to learn more about the full head-to-toe PPE range by Honeywell.

Donovan van der Schyf, marketing coordinator at HSE Solutions, noted that the company saw A-OSH as an opportunity to show its presence in the market. "HSE Solutions, in partnership with Honeywell, is at A-OSH for brand recognition and to showcase the diverse products on offer. Honeywell is the only global PPE supplier with such a wide range of products. It is a one-stop shop for head-to-toe PPE," he explained.

Van der Schyf added that, while many PPE suppliers specialise in only one area of protective gear, Honeywell specialises in several products including eye, hearing, hand, respiratory, fall protection, gas detection, disposable clothing and breathalysers.

Aside from the wide range of products on offer, HSE Solutions also promoted its numerous added-benefit services such as site assessments and product training – all of which are offered free of charge.

Duane Basson, training and technical leader at HSE

Solutions, commented: "We undertake a site assessment and then make recommendations. A client may already have PPE in place, but we might be able to offer something that is more comfortable, better for the user, or that offers superior protection."

HSE Solutions assists its clients to find a more permanent, affordable solution. The full range of Honeywell PPE can be introduced over a period of time. "A client might phase in the product as a project. It's not always something from which the benefits would be seen immediately, rather it's something to aspire to. We take the product from safe, to safer, to safest," Basson said.

Once an assessment has been completed, the client and an HSE Solutions distributor receive an unbiased report that simply identifies the PPE required. If a client decides to make use of Honeywell products, HSE Solutions will place the PPE on trial and assist with any training needed to correctly use and maintain the equipment.

During the trial, the client can give feedback on the product. Fitment tests ensure that the product fits the users, as employees are less likely to wear ill-fitting PPE.

"Oversized gloves are often an issue. The longer finger tips get stuck in machinery. This is why the assessment and the follow up are critical," Van der Schyf explained.

Basson added: "We make sure the PPE is suitable for the

application, that it fits the individual and is used correctly."

Training clients to use Honeywell PPE is also an essential part of the services offered by HSE Solutions. "We might have a customer who blames the product, when, in fact, the product is being used in the incorrect application. Through training, we avoid this problem," Basson stated.

HSE Solutions prides itself on offering stylish PPE. "We've realised that people don't just want to wear PPE for protection, they also want to look good. Our products exceed the required standards, but are also stylish so that employees want to wear them. We even have people who wear our spectacles for running or cycling," said Anton Hertenberger, distribution programme manager at HSE Solutions.

The HSE Solutions stand provided an idea of the variety of products on offer. Hearing protection ranges from disposable earplugs to high-end earmuffs with noise-cancellation and processes to communicate better.

Respiratory PPE starts out at basic disposable half-faced masks (with an added seal that fits snugly over the nose to avoid fogging up glasses) to full-face masks with optional escape and supplied-air solutions.

“Honeywell is the only global PPE supplier with such a wide range of products.

HSE Solutions can also offer a 140-kg maximum weight capacity harness, although Van der Schyf advised companies to carefully consider the application before purchasing the harness. An employee working at height should ideally be in good shape and, along with their equipment, should weigh below the maximum weight.

HSE Solutions also promoted its Envitec AlcoQuant 6020 breathalyser and various gas-detection devices. The breathalyser has a passive and active mode. The passive mode gives a pass or fail reading, while the active mode determines the exact blood-alcohol level. The results can be printed out and logged on the device or optional PC printer software.



ABOVE AND LEFT:

A delegate at the A-OSH Expo tests the noise-cancelling Honeywell hearing protection, while another learns more about the Honeywell gas-detection devices provided by HSE Solutions.

"The results are evidential, which means it can be used in a court of law," Basson added. This allows a company to hold its employees accountable, while reducing the opportunity for tampering with the results.

The HSE Solutions gas-detection devices can be connected to a single platform that tracks all the connected devices and their status. This removes the responsibility of reporting a gas leak from the floor manager or individual workers and makes it the responsibility of the occupational health and safety officer and/or manager.

In one corner of the HSE Solutions stand, Optrel welding protective equipment was on display, which is also distributed by HSE Solutions in South Africa. The Optrel helmets have various benefits such as auto shade adjustment, flip shades and pumps to push fresh air into the sealed helmet through a Powered Air Purifying Respirator (PAPR) system. "Optrel offers superior protection and comfort through world-class innovation, design and technology," Basson concluded. 



The Honeywell protective spectacles would easily sell in any high-end sunglass retailer and, along with the protective Honeywell goggles and face masks, come with a variety of features such as ultra-violet (UV) protection, impact protection as well as anti-scratch and anti-fog layers. Employees with sight impairments can have prescription lenses attached to their spectacles for optimal comfort and vision.

Honeywell hand protection comes in different sizes for a variety of applications, from general abrasion, cut-and-tear protection to working with high-voltage electricity and chemicals.

The Honeywell fall-protection range, offered by HSE Solutions, includes anchor points, body harnesses and connectors. The harnesses have different webbing to choose from including stretchable, water-resistant and padded webbing with various hardware options.

SCAN HERE TO LEARN MORE OF THE VARIETY OF PRODUCTS ON OFFER, OR TO VIEW THE FULL PRODUCT CATALOGUE



THE US\$ 9-TRILLION SOLUTION



HOW DO WE BREAK THROUGH THE SAFETY CEILING? IMPLEMENTING MORE SAFETY SYSTEMS OR PROCEDURES IS NOT THE ANSWER ... ENGAGING OUR PEOPLE IS

"More? Yes, we need to do more for safety!"

This is the current cry from the heart and lament of the friends, family and co-workers concerning the ongoing injuries and fatalities of mine workers. Our hearts go out to them, and their voices need to be heard. Something must be done, and urgently. But what?

Mining houses are already pouring millions into keeping their people safe. Is more personal protective equipment (PPE) the solution? Perhaps additional training, or extended toolbox talks are needed? While, in some places, this may be beneficial, in order to see significant change, I do not believe the primary focus should be on doing more.

Statistically, the safety improvements over the last decade have made a remarkable difference. The reduction in incidents is encouraging. In the early 2000s, more than 250 people were dying in the mining sector alone. Since 2003, apart from 2007 and 2017, there has been a steady decline.

Before we celebrate, in spite of all the safety interventions, more than 70 miners still die every year. That is fatalities only. If we start to add injuries and near misses the figures become worrisome again.

The statistics shouldn't be what jolts us to attention, however. It is the fact that these are people, not figures. They are fathers, husbands, wives and mothers, friends and providers. They are individuals, who have dreams and desires for a better quality of life.

The current strategies have brought about tangible improvements. Be that as it may, they haven't taken us to our desired goal. I understand this is a complicated matter and no "one thing" is going to solve everything. Very broadly speaking, the drive towards "zero harm" is based on having the right risk-management systems in place.

Lots of time and hard work goes into ensuring that the standard operating procedures are up to date. People have undergone the necessary training, risk assessments have been completed and safety briefings attended. There are piles of paperwork to prove that safety measures are in place.

Combined with having optimal systems, a substantial amount of money is spent on ensuring that the working area is as safe as possible through engineering, maintenance and housekeeping. Even with all this effort and expense, the reality is that the mining sector, like others, has hit a barrier. Something else is needed to break through the 70-fatality barrier.

Simply doing more is not the answer. It might be more valuable to examine the effectiveness and value of our current strategies, processes and activities. If we are candid, I wonder how much (of what is being done under the guise of safety) is actually working and making people more safe?

Disappointedly, I have sat in on safety briefings that if no one had attended it would not have made a difference.

While having world-class systems and engineering in place is moving us towards "zero harm", will it get us there? The answer is a resounding no, and here is why . . .

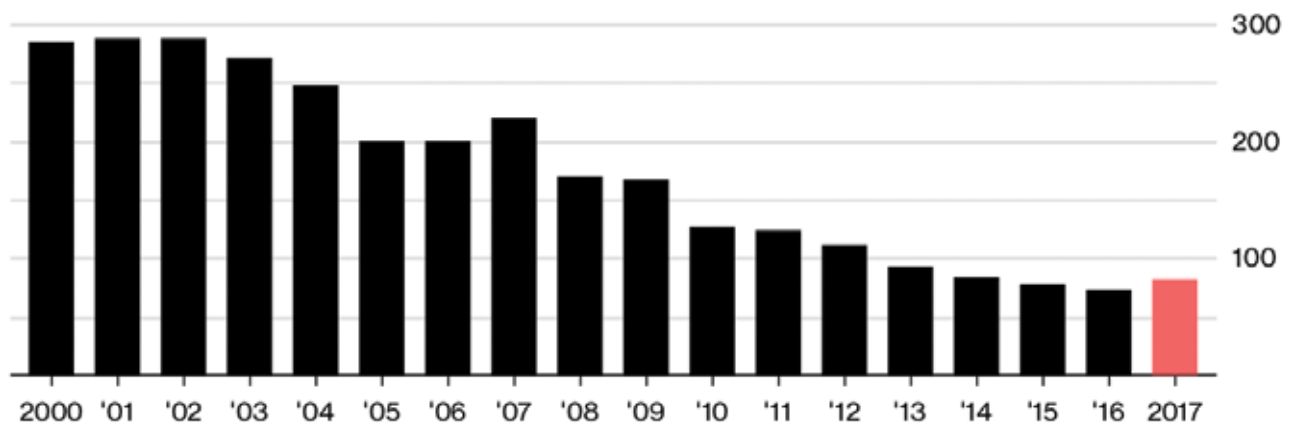
The research by Gallup is startling. Worldwide, the loss in production income because of the lack of engagement of workers is US\$ 9 trillion. I always laugh when people tell me what I am doing is "airy-fairy". There is nothing fluffy about



“ Business units that had high levels of employee engagement also had 70-percent fewer safety incidents than those with low engagement levels.

Losing Ground

South Africa's mine deaths increased for the first time in a decade



Source: Chamber of Mines, Harmony Gold

The same irrelevant topic is repeated. Ill-equipped safety officers run toolbox talks without the skills to facilitate the meeting in a meaningful way.

I have seen crews being allocated only five minutes to discuss the activities of the day, including the safety elements, before being rushed to start work. Who are we bluffing?

On the other side, I have had electricians tell me how it can take up to 45 minutes to do the required risk assessment to change a plug. Is that what will keep him safe?

US\$ 9 trillion – that is hardcore bottom-line stuff.

Companies often underestimate how much their managers and supervisors impact the overall performance and safety of their organisation. Gallup found that companies with higher levels of engagement with their people recorded a 37-percent decrease in absenteeism, 25-percent decrease in staff turnover, 60-percent fewer errors and defects, 21-percent increase in productivity and 22-percent improved profitability.

When looking at safety specifically, Gallup's 2016 study

(which included 1.8 million workers in 73 countries across 49 industries), revealed that Business units that had high levels of employee engagement also had 70-percent fewer safety incidents than those with low engagement levels.

That is massive, and it should get us to sit up and take notice. What company does not want to improve its safety record by 70 percent?

The number-one contributing reason for workers to be engaged, or disengaged, is their direct supervisor. The most momentous action any company can take toward to improving its safety culture is investing in its leadership capacity.


We have underestimated the impact leaders have on how their people approach work and safety. Gallup's research spans over 30 years. These figures are not new, yet year after year they remain in the same range.

Despite us understanding the importance of leadership, a tremendous number of people are still given positions of authority because of their technical capabilities, without necessarily having the required leadership skills.

If we are truly serious about the safety of our people, investing in our leaders must become a top priority. Thanks to the breakthroughs in neuroscience, we have a better grasp of the of competencies effective leaders need to have.

Unfortunately, many of the off-the-shelf leadership courses just don't cut it. We know that knowledge is not the main driver of behaviour, which is driven rather by attitude and beliefs. Having the ability to influence the beliefs and mindsets of workers is essential.

When it comes to the safety dynamic, other facts relating to how our brains work become crucial. When we understand, for example, that we have a very limited conscious processing capacity, then the way we facilitate meetings, give instructions and interact with workers, demands a new approach.

When it comes to having a robust safety culture, embracing a strategy that includes developing the neuro-leadership skills of staff – from supervisors to senior managers – is no longer a "nice to have", but an essential ingredient. 



Dr Brett Solomon is the CEO of The Kinetic Leadership Institute and is a recognised leader in combining neuroscience, change management and leadership theory to drive cultural transformation processes. Brett specialises in neuroleadership, especially when it comes to an understanding of what motivates human behaviour and how to influence it. He has been involved in numerous culture change and leadership development initiatives throughout Africa, Australia, Canada, Saudi Arabia and the United States.

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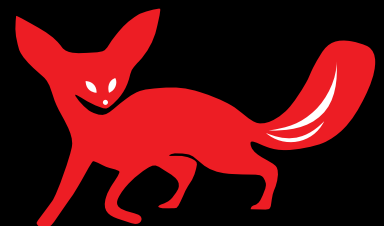
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BACK TO THE FUTURE

PREPARING TO SPEAK TO AN AUDIENCE OF SOME 800 SAFETY PRACTITIONERS IN ABU DHABI RECENTLY, I PONDERED THE EVOLUTION OF THE SAFETY PROFESSION

During my research, I came across a paper that clarified our collective objective as "a safe and healthy future for everyone who works".

It also suggested, however, that the role of safety practitioner has "developed in a fragmented and somewhat undisciplined way", and pointed out that the common aspects of the job are typically to facilitate poster campaigns, act as a workplace hazard inspector, or at times as a safety policeman holding limited skill in proposing practical remedies to the risks encountered.

The paper was dated 1975. More than four decades later, has anything changed?

THE MONK

Many safety practitioners carve out a niche for themselves as a subject-matter expert. The role is clear: to establish best practice in safety in all areas of the organisation. If one can do this, the accidents will stop, and the pay rise will come.

However, this position risks effectively distancing the practitioner from the rest of the organisation, becoming what Mike Buttolph, of Cranfield University in the United Kingdom (UK), refers to as a safety monk: being devoted to the meticulous maintenance of the good book, the safety manual, while living in isolation in an office at the end of the building.

While some of the team still believe the monk has some knowledge or skills that add value, others feel they've become unreachable and appear to be operating in a different world.

THE MERCENARY

The mercenary is a safety activist who takes centre stage in the organisation when it comes to matters of safety. They are the go-to person and can usually recite the letter of the law for any given workplace risk, explaining in detail where the breach is, and what the penalty will be for failing to resolve it.

Their training sessions for colleagues revolve around how seriously regulatory bodies view safety failings, and ensuring that the managers are clear that, while on their mission of putting "safety first", they have been given carte blanche from the CEO to stop any task, machine or process that they feel is not being operated with safety as priority.

Regarding themselves as the "protector" of the organisation, their "command and control" style of influencing is tolerated by their colleagues, none of whom wish to fall foul of the law and end up on the receiving end of an enforcement order.

The mercenary has successfully turned safety into a mystical black art, a sort of "stealth and safety". Under their instruction, their peers have all realised just how complex

the science of safety is, and that there is no one who really understands how to carry out risk assessments, lead safety studies, or get to the bottom of accident investigations when the mercenary is not around.

Even when their peers have a go, these managers find themselves unable to cover the broad range of risks that they know the mercenary will find on his or her return, so the majority leave well alone – it's far better that the safety officer stays the front of all safety knowledge and the managers get back to doing what they know best; running production.

Beyond their precise attention to detail, mercenaries cultivate an air of nonchalance and can appear reluctant to get involved. Their terms of engagement are usually split between the assumption that no one else is as skilled, or because no one else has the desire to try to solve these complicated safety puzzles, safety meetings are held with all the formality of a regimental inspection.

To prove that safety is a line-management responsibility, the production manager chairs the meeting; though with the mercenary at his right hand to provide the direction, reference to the safety rules and regulations and, in times of hesitation, the mercenary's words to fill the voids of his conversation.

Like the monk, the mercenary has also found a niche as a safety specialist; a tolerated archangel who springs in to save the day and protect the company when things go wrong and the threat of regulatory action becomes reality. The mystique with which they shroud their skills swirls like a superhero's cape.

want to work safely, and that the managers are constantly striving to always do the right thing – though on occasion he or she accepts that they are too overwhelmed by their day jobs to do it.

The missionary believes that these managers need someone to whom they can confess their safety sins, to explain just why they couldn't get safety right, and then to learn the lesson of what to do next.

Penance is rarely imposed. The missionary's parables are preached through the form of best-practice examples, benchmarking opportunities, and new safety checklists. All these are well-intentioned and gently offered – but they leave managers with a feeling of disconnection. This off-the-shelf, one-size-fits-all just ... well, just doesn't fit.

Rather than seeking clarity, the manager keeps his head down to avoid more of the same from the missionary, and the workers pull together to protect their colleagues. Of course, it's hard to fail to respond to the missionary's joy and passion as he or she smiles constantly on the audit tours of the workplace, so civil greetings are exchanged freely – but, despite the warm feeling and well wishes, the missionary is out of touch with the realities of the shop floor and the strategies of the boardroom.

BLIND EYES, BUREAUCRACY AND NICHE-CARVING

While these safety stereotypes were developed two decades ago, they still provide a relevant analysis of the development of the role of the safety practitioner. Perhaps you feel a sense of familiarity with one or more of these characters. Each shows how the safety profession has the power to – unintentionally – drive the management of safety in the wrong direction.

- The monk's dogmatic drive for the organisation "to be the best in terms of safety", means they may not see beyond their own spectacles. They have failed to engage their stakeholders and have become a slave unto their own agenda.
- The mercenary builds bureaucracy through generating a sense of fear – of enforcement, of production loss, or of penalty. A fear against which only they can protect, believing in the superhero's invincibility, though the smoke and mirrors don't help anyone.
- The missionary's gentle character and genuine desire to be at one with the world prevents him or her from raising the game – and driving a sense of pace and urgency in a modern business as they pursue performance improvement.

THE MISSIONARY

This pure and faithful evangelist is on a mission to convert us all to become believers in the power of safety. A close call with a workplace accident some years earlier provided the calling they needed to move towards the light. Adorned with the very latest in personal protective equipment (PPE) the missionary always practices what he or she preaches.

Always looking on the bright side of life, the missionary sees safety from a humanitarian perspective, knowing that his or her colleagues are intrinsically good people, who

Each carve their own niches within the workplace, isolating themselves on a safety island, where management peers are happy to turn a blind eye and let them reside, as long as they don't have to do the "safety work" themselves.

WHAT WENT WRONG?

There are two principal reasons for the evolution of safety into monk, mercenary or missionary roles. First, the delegation of all things safety to a single person: the safety officer. Historically, the exclusive remit of the safety officer



was the prevention of traumatic injury. Why this focus upon only those most serious of risks?

If we consider the role of those managers within the production environment, on an average day, they face many challenges and problems: production pressures, customer complaints, deadlines, quality control and assurance, product recalls, plant and equipment breakdowns and maintenance, raw material shortages, cost of goods sold, staffing and absence – to mention but a few.

Some managers may have benefited from some general management training – however, many others will have learned their craft through the constant immersion in these daily events. However, no matter which learning route has been followed, the rub is that the average manager is simply not trained to deal with danger.

Accidents, while certainly opportunities for learning, by their very nature do not occur with such regularity as other management issues. When they do arise, the manager strives to balance production and safety while taking care of the injured party.

In good organisations, the safety officer will be there, ready to catch these safety failures, and resolve them with little fuss, as his or her own contribution to keeping the machines running. However, this approach does nothing to further the manager's ability to manage safety. The safety officer has become an organisational "safety net" and so, for as long as he or she keeps catching the issues, why bother doing anything differently?

The second reason is the creation of the black art of bureaucracy. The ideology of a structured approach to safety (through the sharing of information and open, cohesive working practices and relationships) has been frequently obscured beneath layers of bureaucracy as well-meaning safety officers, unsure of expectations, find themselves in a Catch 22 situation: trying to help management, but unaware of the need for – or application of – proportionate risk management.

The officer, while trying his or her best, diligently drafts policies and procedures to fill the safety file and keep the regulators away. Safety officers have meticulously

developed libraries of risk assessments, revised standard operating procedures and, at the same time, alienated management who see their time spent mired in paperwork, which seems irrelevant to the work required and too bureaucratic.

Accordingly, the great risk we run is for organisations to assume that everyone within shares the same common understanding of how the organisation works, and, specifically, how safety works. Before long the organisation has developed its own problem-oriented culture towards workplace safety, and negative stigmatisation and isolation have taken hold.

Overlaid across these two challenges are fast-growing perceptions of an increased litigation culture in many countries around the globe, which has fostered a fear-based philosophy where the production of such voluminous documentation has become regarded as the only way to provide vital armour-cladding to protect against legal action.

Ironically, this approach widens the disconnect between safety and reality, and strengthens the belief that safety can only be "done" by the experts.

Over the last 40 years, the safety profession has experienced a profound evolution, from redefinition of roles and responsibilities, to a dramatically changing regulatory landscape. The approach of the safety practitioner must also continue to evolve as organisations and expectations change around us.

Henry Ford said: "If you keep doing what you're doing, you'll keep getting what you got." The future will be for those who not only keep pace with change, but can manage to stay ahead of the curve.

To break through the glass ceiling and truly drive added value from safety back into the business, we need a step-change in our approach, from being reactive to being responsive.

There is no room for the monk, the mercenary, or the missionary in the safe new world. The role of the safety officer has evolved, and will continue to evolve, beyond the specialist practitioner remit, and into the safety leader. **SM**

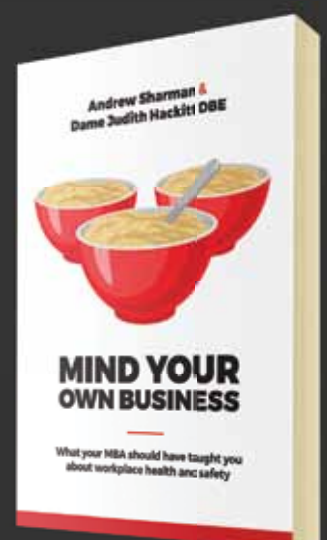


Professor **Andrew Sharman** is Chief Executive of RMS – consultants on leadership and cultural excellence to a wide range of blue-chip corporates and non-government organizations globally. He's an international member of SAIOSH; Vice President of the Institution of Occupational Safety and Health; and Chairman of the Institute of Leadership & Management. Contact him at andrew@RMSswitzerland.com

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A TOUGH JOB

OCCUPATIONAL HEALTH - SIMPLY INJURIES ON A DIFFERENT TIMELINE

I recently watched a documentary about sulphur mining on an Indonesian island off East Java.

On this island, day after day locals enter the edge of an active volcano, Mount Ijen, to mine solidified sulphur.

There is a captive market, with the sulphur being sold and used in the manufacture of explosives, cosmetics, firelighters and bleaching activities. The sulphur is, therefore, a valuable resource to the people of the island.

The problem, however, lies in the extraction methods and working conditions; and, once again, through my health and safety lens, I found myself thinking about what it is that companies could and should be doing differently.

The conditions to which the so-called miners are exposed reminded me of similar conditions and risks in the article I wrote called "As sweet as honey" covering the honey harvesters in Nepal (which was published in SHEQ MANAGEMENT issue 6 of 2017), only this time the main risk to those entering the volcano is related to occupational health, although there are, without doubt, also certain safety risks.

THE MINING PROCESS

These miners wake up in the early hours of the morning to start mining the sulphur from the volcano, before the sun has risen and before the heat of the day beats down on them.

Day after day, they set about the long and tiring walk up the slopes of the mountain, over the lip of the volcano and down the inner slippery rock slopes and into the depths of the volcanic crater below. Here they extract the solidified sulphur masses.

Solid sulphur is formed when the toxic volcanic gasses cool down. To expedite this process and maximise product

availability, the miners have developed a way of fast-tracking the hardening process. They've installed pipes connected to the openings in the walls of the volcano to capture the gases and funnel the condensate sulphur into large drums where it hardens.

Miners then break the solidified sulphur into blocks to be extracted from the volcano and sold to prospective buyers. The blocks are equally distributed in two baskets, connected by a long bamboo pole and spanning the miners' shoulders as they negotiate their passage out of the volcano. The combined weight of the product in the two baskets is sometimes in excess of 90 kg.

THE REALITIES AND THE RISKS

There are definite safety risks associated with this mining technique. For starters, Mount Ijen is an active volcano! Beyond that, the risk of both minor and more serious injury remains high, with slipping, tripping and/or falling being a very real threat.

What struck me, however, was the far less obvious, but equally severe, occupational health risks to which the miners are exposed; with the toxic sulphur fumes and volcanic smoke burning their eyes and throats, and impacting their lung functionality.

In many instances, and despite the toxic gases and volcanic smoke present, the miners are provided with little or no personal protective clothing and equipment to protect them from injury or occupational illness or disease.

At best, they wrap rags around their faces to protect against gas inhalation. They're also not issued with safety helmets, gloves or safety shoes, and don't have suitable tools for breaking the solidified sulphur into more manageable blocks.



Despite these working conditions, the miners will accept the risks associated with this work in order to provide for the needs of their families. Even more concerning, is that each miner earns the equivalent of six US dollars (R74) per day.

THE RESPONSIBILITY

The reality for these sulphur miners is dire: continuous

It is not uncommon for companies to place more focus on safety than on occupational health issues – primarily because key performance indicators are more often associated with lag and lead indicators related to the incident trends and the safety initiatives.

Typically, when an injury occurs, the consequences of the incident are immediately visible (for example, a cut or fracture and, in most instances, blood).

In the case of occupational diseases, on the other hand, the results of exposure to the source (such as noise, asbestos, chemicals and repetitive tasks) are only identified at a much later stage. These diseases typically don't affect current injury numbers, such as total recordable case rates, or those for newly compensated occupational diseases.

Occupational disease needs to be considered an injury to a person, just on a different timeline. Occupational health should, therefore, be given the same level of attention as the safety of employees and contractors.

ASKING THE RIGHT QUESTIONS

The question to companies is whether they have, in addition to their attention to safety, considered the various elements related to occupational health in their overall risk-management approach.

Let's consider some of the aspects:

• Medical examinations

A comprehensive medical programme is an important component of a company's risk-management programme. This

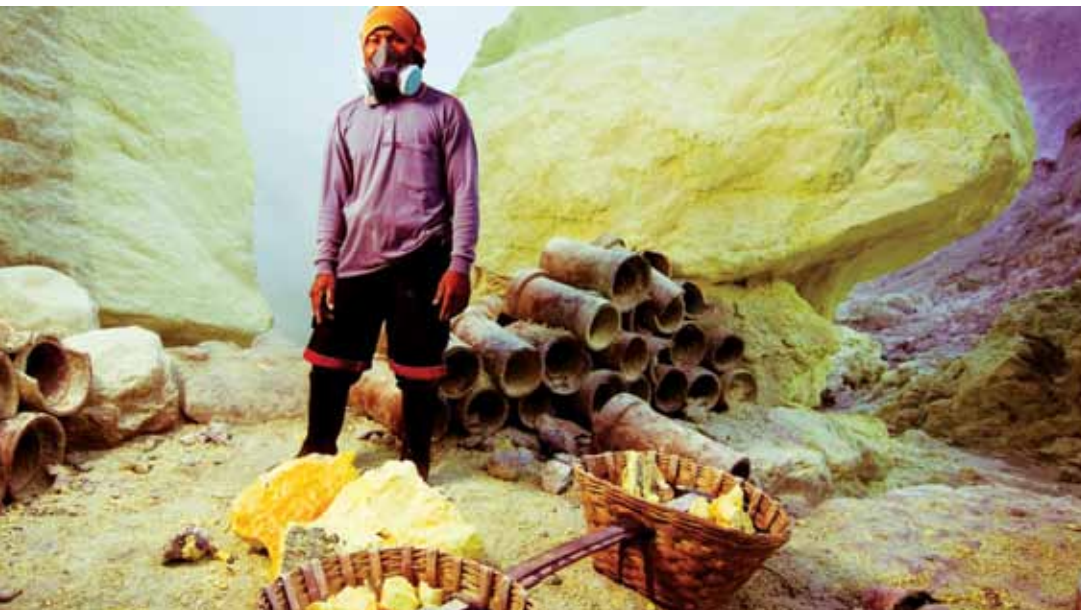
could include pre-employment medical examinations as well as pre-placement medicals, all of which would help to ascertain whether the applicant is suited to the position and capable of conducting the tasks required without endangering their safety or overall health.

Pre-employment medicals also provide the company with a baseline of a person's medical condition, so that they can monitor any deterioration while in their employment. In situations such as these, regular medicals are also helpful, so that both employee and employer can monitor their health and identify any trends of deterioration.

Accurate person-job specifications can, and should, be used to support all medical assessments.

exposure to toxic gases and volcanic smoke, all with long-term negative effect on their health; no consideration given to whether a miner is medically fit to perform the task; no monitoring of the real impact of the toxic gasses on their health; and no thought for how the overall ergonomics of the task is impacting their health (such as bending and climbing steps and slippery slopes while carrying heavy loads).

In contrast, companies have a responsibility to ensure a safe and healthy working environment for their employees, who need to be able to do their jobs with the comfort of knowing that all the necessary steps have been taken to mitigate the associated safety and health risks.



In addition to medical testing before and during employment, companies may also require exit medical tests to confirm the employee's condition of health at the time of leaving their employ. Should the person's health deteriorate at his or her next place of employment, it can quickly be ascertained whether working at the former company contributed to the ill health.

“ Safety and health need to always be on our agenda, and we need to constantly make safety the “easy” option for employees.

• Ergonomics

When developing workstations and process equipment, a company should consider the ergonomic-related aspects of that job and/or task. Companies need to mitigate any negative impact that a particular job or task may have on an employee.

We only need think of the Indonesian miners carrying up to 90 kg of sulphur on their shoulders all day to appreciate the impact on their backs, necks, shoulders and knees.

• Monitoring

It is important for industries to measure and monitor the levels to which employees are exposed to gasses, extreme temperatures and noise. All these elements have an industry limit, which needs to be monitored through personal or fixed monitors in high-risk areas of an operation.

Thinking back to the miners, there is definitely no monitoring of the volcanic gasses to which they are exposed, and from which may have lost their lives over the years.

• Personal protective clothing and equipment

Although typically the last resort in the hierarchy of controls,

issuing employees with the correct protective equipment (in good working order) is very important. In the case of our sulphur miners, the rags tied across their faces should be replaced with suitable gas masks to protect them from exposure to the toxic volcanic gases.

It's not enough for employers to just issue the correct equipment. They also need to ensure that it's all in good working order and that employees have received appropriate training in terms of using the equipment.

MAKING THE TOUGH JOBS A LITTLE LESS TOUGH


Proactive occupational health initiatives and controls need to receive the same degree of scrutiny and attention as the safety initiatives and controls. The reality is that employees are sometimes forced to make a trade off – their health for employment retention – all in the noble pursuit of supporting their families.

Again, the Indonesian miners are a case in point: whether in their own private capacity or as company employees, they opt to engage day after day in a high-risk activity (with obvious and definite impacts on their health) to be able to support their families.

As companies, we do not have the luxury of ever assuming we've done all we can to ensure the health and safety of our employees! Safety and health need to always be on our agenda, and we need to constantly make safety the “easy” option for employees.

When considering the hierarchy of controls, it's not always possible to eliminate or substitute a task or hazard. However, we can, and should, always consider engineering controls before implementing administrative controls, and issue personal protective equipment to address the residual risks.

Where instituting engineering controls is not possible, it is of utmost importance that other robust controls are implemented.

As leaders, we have a moral obligation and responsibility to our employees and their families to take occupational health matters seriously! 



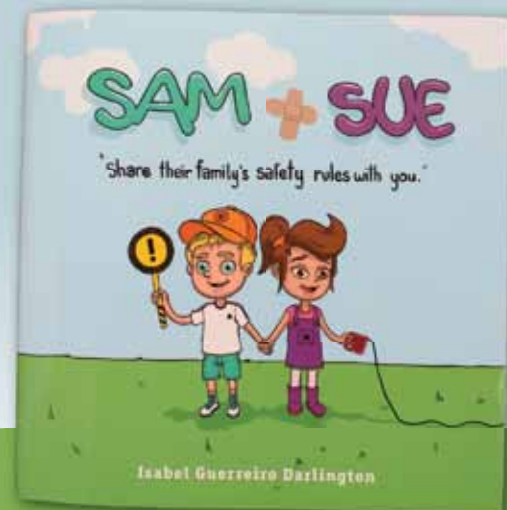
Brian Darlington is the group head of safety and health for the Mondi Group, based in Vienna, Austria. He has filled the role since 2012 and is responsible for safety and health in more than 30 countries. Brian started working at Iscor before joining Mondi in 1987, working in Gauteng. In 2000 he transferred to the Kraft Division in Richards Bay. During 2005, Brian transferred to Europe, taking up the position of business unit SHE manager, responsible for SHE in paper mills in Austria, Hungary, Israel, Slovakia, Poland, South Africa and Russia, as well as forests operations in South Africa and Russia.

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KEEP NOTHING UNDER THE TABLE, EXCEPT YOUR SHOES



"UNMANAGEABLE FRAUD AND CORRUPTION" HAS BEEN IDENTIFIED AS ONE OF SOUTH AFRICA'S TOP RISKS. COULD EXPLORING THE ISO 37001:2016 ANTI-BRIBERY MANAGEMENT SYSTEM PROVIDE A SOLUTION?

The 30th African Union Summit, held in Addis Ababa, Ethiopia, earlier this year, revolved around the 2018 theme for the African Union: Winning the fight against corruption: A sustainable path to Africa's transformation. This was a most fitting "call to action" for the continent.

Since its inception in 1995, Transparency International's Corruption Index has been keeping track of how the public sectors in countries score on this issue. The index applies a scale of zero to 100, where zero is highly corrupt and 100 is very clean.

For example, the Corruption Perceptions Index, 2017 noted that "the worst performing regions are sub-Saharan Africa (average score 32), as well as Eastern Europe and Central Asia (average score 34)".

Much closer to home, the Institute of Risk Management South Africa's (IRMSA's) Risk Report 2018, fourth edition, ranked "unmanageable fraud and corruption" at number two out of the top-ten risks for the country.

BUILDING A STRONG PLATFORM

Mitigating risks associated with corruption in organisations needs a strong platform to gain traction. The adoption of an anti-bribery management system in accordance with the ISO 37001:2016 Anti-bribery Management Systems – Requirements (with guidance for use) standard, would be appropriate in any organisation.

The good news is that the standard is certifiable and can be incorporated into any organisation's current management system.

Bribery is defined by the International Organisation for Standardisation (ISO) as "the offering, promising, giving, accepting or soliciting of an advantage (which could be financial or non-financial), directly or indirectly, in violation

of applicable law, as an inducement or reward for a person acting, or refraining from acting, in relation to the performance of that person's duties".

Like any other ISO standard, leadership commitment and drive are required to implement an anti-bribery management system. This will ensure a risk-based campaign towards due diligence that will eventually support good ethical decision-making. It is important to note that ISO 37001 is based on the ISO High-Level Structure (HLS).

During the implementation of the standard, ISO 37001:2016 will address the following in relation to an organisation's activities:

- Bribery in the public, private and not-for-profit sectors;
- Bribery of the organisation, or of its personnel, or business associates acting on its behalf or for its benefit;
- Direct and indirect bribery (for instance, a bribe paid or received through, or by, a third party).

Bribery practices should not be seen as the "cost of doing business". Organisations need to have robust anti-bribery policies and supporting programmes. These should be made known to the relevant stakeholders to enforce wider compliance.

The appointment of key personnel to provide oversight will further strengthen the compliance aspect. The adoption of the ISO 37001 standard, alone, would not necessarily root out corrupt behaviour. Top management therefore needs to commit to fair conduct that would signify a desirable ethical culture while doing business.

Time and time again, we have seen certain companies colluding to gain competitive advantage over others, thus putting their reputations at risk. An organisation that implements an anti-bribery programme, or management



system, represents a profound commitment to continual assessment and improving its ethical behaviour.

This ensures that there is ongoing anti-bribery awareness and assessment of due diligence to ensure bribery risks are continually identified, and strict financial supply chain controls are implemented and reviewed.

It is worth noting that there are several risky situations where bribery might manifest. Whether is it expressed or not, the risk is still there and it is necessary to adopt appropriate control measures. It is critical to put terms and conditions in place that relate to curbing potential bribery practices, for example, use contractual obligations to enforce compliance.

QUICK WINS

As the saying goes "knowledge is power". Any organisation looking at entering the market in the aforementioned "most corrupt territories", identified by Transparency International, needs to be aware of bribery and recognise it as a significant risk.

Ethically minded organisations need to enforce ethical practices. This will further complement enforcement of laws such as the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 in South Africa.


In terms of anti-bribery and corruption, PricewaterhouseCoopers challenges us with the following questions:

- How do we manage our third-party service providers?
- Are we using third parties to help expand into new markets?
- Do we deal with government officials?
- Are we facing business decisions where facilitation payments or bribes are expected?
- Do we do business overseas, or are we considering overseas expansion?

Additional sources such as *Corruption and the law in South Africa, A quick reference guide*, published by Corruption Watch, and *Business principles for countering bribery*, published by Transparency International, can provide organisations with additional resources to implement anti-bribery policies.

Time will tell if evidence of adherence to ISO 37001 could become a pre-requisite in procurement requirements. It will be a good yardstick for the supply chain functions, project managers and funders alike. Hence, the requirements of ISO 37001 would be a good platform to include into an organisation's existing anti-bribery programme.

We have seen from the CPI index of the most corrupt countries, and the IRMSA's report on South Africa's risk rankings, that it is important for companies to avoid the scenario of being seen as the most corrupt company!

Companies would be well advised to: "Keep nothing under the table, except your shoes." 



Hope Mugagga Kiwekete is a managing consultant at the Centre for Enterprise Sustainability. Previously he was a principal consultant risk management at Transnet Freight Rail, a management systems specialist and senior EHS auditor at the South African Bureau of Standards. He has practised as a management systems consultant, trainer and auditor in the fields of risk management, environmental, energy, occupational health and safety and quality management in various industry sectors in eastern and southern Africa and Southeast Asia.



SILICOSIS LITIGATION – THE SETTLEMENT

WITH AN OUT-OF-COURT SETTLEMENT TAKING PLACE RECENTLY, THE TIME IS RIGHT TO RESOLVE THE QUESTION OF COMPENSATION FOR OCCUPATIONAL DISEASES

We have previously discussed the silicosis litigation, where we expressed a view on how this matter should be dealt with going forward. The current system – whereby employees sue employers in terms of the ill-defined and ill-suited common law, resulting in the establishment of multibillion-rand trust funds, which are vulnerable to being “captured” down the road – is not the way to go.

An out-of-court settlement was announced during May. This will lead to the matter being settled. The agreement is, however, still to be ratified by the court. While the details of the agreement were not made public, some have emerged and have become public knowledge. A R5-billion trust fund is to be established.

With this matter now moving out of the way, it is the right time to resolve the question of compensation for occupational diseases.

A few points should be emphasised:

- **Employees have received compensation for occupational diseases for over a century**

Since the early part of the previous century, miners have received compensation for occupational diseases. This case does not give compensation where no compensation existed previously.

A study of the early history of compensation for occupational diseases in mines demonstrates that the mining industry led the way in providing compensation. The compensation system was one of the best, if not the best, in the world. The current matter is about receiving double compensation; having been compensated in terms of legislation, to then be compensated again.

- **Avoiding double or triple compensation**

The original issue was whether or not miners, who had contracted occupational diseases, having received compensation, could sue their employers once again for compensation. Could they get a second bite of the proverbial cherry?

The High Court and the Supreme Court of Appeal had concluded that they could not. The Constitutional Court overturned the decision of the Supreme Court of Appeal, for the first time opening the way for double compensation.

This clearly leads to complications. One claim in terms of the legislative scheme, another in terms of the common law, another in terms of other social security benefits, another in terms of some other piece of legislation, another in terms of the Trust ... and so on.

The possibility of double compensation is an everyday experience. You accidentally drive into someone else's car

and you are insured. Your insurance company pays for the damage. It would be a problem if, having been paid, the claimant can then argue that he is entitled to be paid again by you, since you did not pay, but your insurance company did. You would, of course, argue that you have already paid via your insurance premiums.

Therefore, when a scheme is set out in legislation, it will always prohibit the compensated person from claiming twice, and if he or she can claim twice, then the first payment has to be subtracted from the second.

• Occupational diseases – government failure

The main argument put forward in the press in favour of the class action was that the compensation received was inadequate. The compensation payable is specified in the compensation legislation. The level of compensation can be increased by changing the legislation. It is unnecessary to achieve this by opening a second basis of liability – the common law.

So, if the employees did not receive adequate compensation, it is because the legislation was not updated. This could easily be achieved via negotiation between labour, business and government.

Nedlac was established as a forum for this purpose. If the legislation was inadequate, it is not a problem created by the employer; it is a failure of government. Trying to rectify government failure via the back door of the courts is a problem, and there are many examples from around the world to illustrate this. The so-called asbestos litigation crisis that has been raging in America for decades is a prime example.

• Confusing compensation with pensions

Much of the press coverage has been about former employees being sick without an income. There comes a time when we can no longer work. The funding for that period is a matter of pensions and not compensation. Compensation is for loss of earnings during the period a person could have worked.

In many cases, working people do not earn enough to create a pension, and thus, when they go on retirement, they survive from the government pension. Compensation for occupational diseases cannot put a person in a better position than he or she would have been in had they worked.

• Confusing public and private medical care

Another problem is the confusion between public and private medical care. If a person cannot afford private medical care, then they can still receive medical care in the public healthcare system. Worldwide, the provision of medical care is a difficult and intractable problem.

There seems to be a view that a person who contracts an occupational disease should get private medical care. Again, this is a matter to be dealt with via the compensation

legislation. To resolve it via the common law is not a solution.

• The courts do not resolve the problem

The view seems to be that, if a matter can be taken to court, a court judgement will resolve it. From the very nature of a class action, it is clear that this is not correct. The court cannot assess 100 000 claimants to decide the level of their compensation.

Therefore, what happens is a trust fund is established. This fund then processes claims and makes payments. However, this is exactly what legislative schemes do. Thus, the trust fund becomes yet another unofficial workmen's compensation scheme.

However, in this case there is a significant difference. This trust fund is not under parliamentary oversight and thus is more easily subject to "capture". We have already dealt with the strange goings on in the asbestos trust funds, which were established earlier.

There are other trust funds in the mining industry, such as the rehabilitation funds. These should also be examined to see how they are being managed.

In the United States (US), asbestos litigation led to the proliferation of independent asbestos bankruptcy trust funds at a time when there was no framework for their oversight. As it turned out, many of the trusts were operating in opaque circumstances, with some claimants receiving payments from more than one trust for the same injury. This prompted Congress to pass legislation in 2016 to regulate the operations of asbestos bankruptcy trusts.


• The class action litigants do not want a judgment

The idea of going to court is to secure a judgement in favour of the litigant. This is not the objective of a class action. Its objective is to force the establishment of a trust fund.

Class actions have fallen out of favour in the US, where they started, as they are subject to abuse. It is interesting to note that, in the case of this trust fund, the mines seem to have learnt from the asbestos trust fund. The mines do not intend to pay R5 billion over to the trust fund, but have raised a provision and will pay over funds as and when needed.

The litigants have indicated that there are 100 000 former employees with silicosis. It will be interesting to see how many legitimate cases are found. Previous estimates have turned out to be excessively overestimated.

Several times in history, concerted attempts have been made to find people with specified occupational diseases, and they have failed in their quest. Sometimes there was a spike in numbers, but the spike was temporary.

It is for these reasons that we have maintained (and still do) that a long-term solution to the problem of occupational diseases is to fix the workmen's compensation system, not to establish trust funds. 



Legally Speaking is a regular column by **Albert Mushai** from the school of Economics and Business Sciences, University of the Witwatersrand. Mushai holds a master's degree from the City University, London, and was the head of the insurance department at the National University of Science and Technology in Zimbabwe before joining the University of the Witwatersrand as a lecturer in insurance.



SAIOSH AT A-OSH 2018

A-OSH EXPO 2018 PROVED TO BE PARTICULARLY SUCCESSFUL FOR SAIOSH

Saiosh is recognised by the South African Qualifications Authority (SAQA) as the Professional Body to register occupational health and safety practitioners in South Africa in terms of the NQF Act, Act 67 of 2008.

With 11 000 members, Saiosh is the leading source of information and networking opportunities within the occupational health and safety profession in South Africa.

Thousands of visitors went to the impressive Saiosh exhibition stand at A-OSH Expo 2018, to find out more about the services offered by South Africa's leading health and safety professional body. These include:

PROFESSIONAL REGISTRATION

Saiosh has three professional health and safety designations that are registered with SAQA in terms of the NQF Act.

HEALTH AND SAFETY WORKSHOPS

Saiosh hosts ten provincial continuing professional development (CPD) occupational health and safety (OHS) workshops annually. Members attend for free. Two rounds of workshops are held in Johannesburg, Cape Town, Durban, Port Elizabeth and Bloemfontein. The workshops

are webinar recorded and links to the recordings are sent to all members.

HEALTH AND SAFETY CONFERENCE

This was the eighth year that Saiosh hosted an International Health and Safety Conference at the Gallagher Convention Centre alongside the A-OSH Expo.

SHEQ MANAGEMENT

SHEQ MANAGEMENT magazine is the official journal of Saiosh and is South Africa's leading safety, health, environment and quality magazine. Members receive a free subscription to the magazine.

E-LEARNING

Saiosh has a 20-module Construction Health and Safety e-learning programme. Members have free access to the programme and earn CPD points for completing the modules.

LEGAL UPDATES

Members have free access to the updates of all OHS-related Acts. Members receive the update notice as well as the actual new text that has been included into the law title.



It shows the old text before the change, as well as the new edited text as the new law.

LEGAL ADVICE

Members have free access to the Saiosh OHS Legal Advice Forum. This is a platform for members to post OHS legal queries and to receive a professional opinion from a seasoned OHS advocate.

AWARDS

Saiosh provides several annual awards including the Person of the Year and Student of the Year, which include financial rewards. This year, the awards were presented at the prestigious dinner and awards function held on May 22 at Gallagher Estate, Midrand. The 2018 Student of the Year was Tinashe Kamupira and the Person of the Year award went to Jason Norval. **SM**



BURSARIES

Saiosh is aware of the scarcity of skills in the occupational health and safety field. It has also noted that some prospective candidates experience challenges in accessing funds to pay for their skills development. Every year, Saiosh provides a number of bursaries to qualifying members.

TOP:

Jason Norval received the Saiosh Person of the Year award (left). Tinashe Kamupira was honoured as 2018 Student of the Year.

TO FIND OUT MORE ABOUT SAIOSH, SCAN HERE



Photographs by Natalie Field Photography



BEWARE CHANGES TO THE OHS ACT

THE EIGHTH SAIOSH CONFERENCE TOOK PLACE ALONGSIDE THE A-OSH EXPO IN MAY. BILLED AS THE LARGEST OCCUPATIONAL HEALTH AND SAFETY (OHS) CONFERENCE IN AFRICA, IT ATTRACTED SOME OF THE INDUSTRY'S BRIGHTEST THOUGHT LEADERS

Each of the 11 speakers at the 2018 Saiosh conference presented on the most pertinent topics to the industry and, once again, the more than 200 delegates certainly got their money's worth – even benefiting from the expertise of four international exhibitors.

It would be ideal to sum up each of the topics presented on the following pages, if it were practical... Two of the topics have been summed up in this issue's editor's letter, and more of the presenters' thoughts can be found in the next issue. Here we discuss the future of the Occupational Health and Safety Act and Regulations.

FUTURE LEGISLATION

Tibor Szana, chief inspector, inspection and enforcement services at the Department of Labour (DoL), was the keynote speaker on the first day of the conference.

"This being the 100th year of OHS in South Africa, the 2018 amendment seeks to develop OHS into a fully fledged industry. We will see a very different professional landscape in five to ten years' time," he began.

Questioning whether, after 100 years of OHS in South Africa, the country is in a better space, Szana outlined the revised Bill: "The OHS Act as we know it has been in existence for 25 years. Our biggest concern was that we needed to address small, medium and micro enterprises, the informal sector and township businesses. They form a big component of the economy and the same rules need to apply. Health and hygiene forms a major part of industry and the regulations will address that going forward, too."

WHY THE NEED FOR THE CHANGES?

"There are always companies that want to comply, but there are those that don't care about their workers. The purpose of the amended Act is to prevent people from getting injured. Compliance costs less than non-compliance – in both money and time..." Szana warned, adding that the DoL is working towards placing another 500 inspectors on the ground.

In outlining the key changes, Szana discussed the following:



• Risk assessment

The amended Act will, among other things, focus on conducting a workplace-specific risk assessment and, thereafter, developing and implementing a risk-management plan in writing, in respect of every risk identified. This will ensure that the workplace-specific risk assessment is conducted by people who are competent to pronounce on all the risks associated with that workplace. It will also ensure that the workplace-specific risk-management plan is in place and is available at the workplace when requested by an inspector.

"This is a key document for an inspector. A decent risk assessment means someone has done something worthwhile," Szana commented.

• Safety management system

A health and safety management system for the workplace will need to be developed and implemented by employers.

"There will be major changes that provide further guidance," Szana said.

• Section 10

"The old Section 10 is a problem area. It will change and these changes need to be noted," Szana commented.

• Globally Harmonised System (GHS)

The revised Act will now provide the necessary legal framework to allow for the incorporation of certain aspects that will align South African legislation with the current worldwide programme towards the implementation of the GHS.

• Listed work and employees' right to leave the workplace

On listed work, Szana commented that this has never been used before, but it is significant enough to be left in the amended Act. "There is a chance we might use it in the future and it may impact on certain sectors. Very specific requirements of industries need be considered under listed work," he explained.

to prevent further accidents from happening," Szana noted.

• Offences and penalties

In the new regulations, the enforcement provisions will be revised and strengthened; the administrative system for issuing fines will be simplified; and the inspector will be empowered to issue administrative fines. Offences and penalties have now been unilaterally increased, and the period of appeal has been aligned with other employment laws.

"This is the onerous part ... the major change that impacts greatly on businesses. We implore companies to just do it right the first time," said Szana.



The amendment also seeks to empower employees to leave a dangerous workplace when their health and safety are in danger, without any fear of victimisation by the employer.

• Section 16(2)

"Section 16(2) is a contentious aspect of the Act. It is a management issue that needs direct control. It is the responsibility of the CEO to delegate duties in writing and be accountable for any duties that have been delegated. Big organisations will have to match their management structure to Section 16," he noted.

• Health and safety reps

Representatives have been given greater responsibilities, which they have to exercise. This is no longer optional.

"Health and safety representatives have clear functions that must be carried out. If a company's health and safety isn't working, something is not being done properly ... representatives are part of the health and safety structure; they are there to assist and advise. If an organisation operates without them we recommend immediate prosecution," Szana commented.

• Health and safety committee

The functions of the health and safety committee have always been key to ensuring that health and safety is properly managed within the workplace. The health and safety committee will be given more responsibilities in performing its functions.

"The health and safety committee is another key structure that needs to work, not just be there. It has specific duties

Szana commented that further workshops are planned to take place during the course of the year, so that employers can be sufficiently prepared when the revised Act is passed.

He also listed other future changes in legislation, which include:

- Ergonomics Regulations – finalised.
- General Safety Regulations – combined with changes to Environmental Regulations for Workplaces and Facilities Regulations.
- Asbestos Regulations – review complete.
- Hazardous Chemical Substances Regulations – may be combined with Lead Regulations.
- General Administration Regulations – to be presented and finalised in the near future.
- A greater focus of occupational health and hygiene. Workshops have and will be conducted to lay the foundation for the future. SM

OTHER SPECIAL PROJECTS THE DEPARTMENT IS WORKING ON INCLUDE:

- Global Programme for the elimination of Silicosis (2030)
- Elimination of Noise Induced Hearing Loss
- Voluntary Protection Programme
- General Accord
- Sector Accords: Construction, Iron and Steel, Chemical



MEETING EVERY HEALTH AND SAFETY NEED

THE ANNUAL OCCUPATIONAL HEALTH AND SAFETY EXHIBITION, A-OSH EXPO, RETURNED TO THE GALLAGHER CONVENTION CENTRE IN MIDRAND IN MAY. MARISKA MORRIS ATTENDED TO CATCH ALL THE HIGHLIGHTS

A-OSH Expo – the leading occupational health and safety exhibition in Africa – and Securex South Africa, once again joined forces to bring South Africa three days of health, safety and security from leaders in the industry. Combined, the Expos saw a record number of visitors on the first day with 3 700 delegates compared to the 2 600 in 2017.

Sven Smit, portfolio director of both exhibitions at Specialised Exhibitions Montgomery, explained that A-OSH had over 100 exhibitors. He said: "This is a significant leap from previous years and reflects the fact that the topic of occupational health and safety (OHS) is being increasingly recognised across all spheres of employment."

"Our exhibitors spanned areas such as fire and safety, personal protective equipment (PPE), gas detection and signage. The Expo offered insights into alcohol testing, medical kits, safety planning software, training and consulting, as well as certification and auditing."



The exhibitors pulled out all the stops. The BBF Safety Group, for example, had a flash mob of gumboot dancers performing in the company's Wayne boots and Bova and Sisi overalls.

Unsurprisingly, the commotion drew crowds to the stand every time. The Bova and Sisi overalls are locally manufactured and tailored specifically for the South African market. The Bova safety-wear range includes overalls, boiler suits, dust coats and high-visibility work shirts, while Sisi Safety Wear caters for the women in the workplace with overalls, Conti suits and maternity wear.

"We were looking for a unique way to create awareness and excitement around the launch of our safety-wear ranges. As a proudly South African manufacturer, what better way to showcase these garments than through a high-energy gumboot performance," said Vanessa Ronald, senior brand manager at the BBF Safety Group.

The BBF Safety exhibit also focused on its new OHS service offering. BBF Safety recently bought out the Pinnacle Group, and to promote this merger it is offering discounts (until July 31) on safety representative, firefighting

and first-aid training. Courses are also available on legal liability, the OHS Act and ISO 45001 awareness, OHS system compliance audit and the complete OHS system.

The organisers of the A-OSH Expo awarded prizes to the best stands at the exhibition. Select PPE won first prize. While the Select PPE team looked smart in company-branded blue shirts for the men and bright pink safety vests for the women, it was the addition to its stand of the second storey, fully equipped with a coffee machine, couches, barstools and tables, that set it apart.

"We are so surprised, but also very proud of our exhibit. We added the second storey to allow us to answer questions from our clients in a quieter environment with fewer distractions," said Marishka van der Shyff, marketing manager at Select PPE.

"We are planning to visit a few more exhibitions this year and will keep our current stand set-up with minor tweaks. We are excited about the next exhibit."

Other eye-grabbing stands included HSE Solutions with its interactive screens and clean-lined design, as well as G Fox with its more rustic, industrial approach and bright red branding suspended above the stand.

Various supporting OHS organisations, such as the South African Institute of Occupational Safety and Health (Saioh) and NOSA, were also present.

ALCO-Safe exhibited its wide range of drug-testing and breathalyser equipment. It was the company's fifth time attending the A-OSH Expo.

"We've been to other exhibitions, but A-OSH is completely health and safety orientated, which means we've been busy all the time with clients who actually want to buy our products," noted ALCO-Safe MD, Rhys Evans.



He added that the A-OSH Expo is a wonderful opportunity to also showcase ALCO-Safe products. Breathalysers were some of the most popular products, although Evans stated that drug testing is becoming increasingly important, particularly with the possible legalisation of marijuana in South Africa.

"Our unmanned, turnstile breathalyser is one of our most popular products. The breathalyser is mounted to a turnstile, which prevents a gate from opening unless an employee blows into the breathalyser. Based on the results, the gate will open, or a beacon light and siren above the turnstile will go off and prevent an employee from entering," Evans explained.

This unmanned breathalyser, dubbed Alcontrol, has been available from ALCO-Safe since October 2017. It is particularly useful to industries, such as manufacturing, that have expensive equipment, a high volume of employees and a single entry point, or manageable entry points.

ALCO-Safe also promoted its saliva-based drug tests. Evans pointed out that many people are uncomfortable

“ The sessions were often overflowing with delegates, who happily stood through an entire 45-minute presentation.



with a urine-based test, because of the associated privacy issues, but a saliva test could, in theory, be done anywhere.

"An employer could test an employee in an office. It is easy to use and gives results on site. A urine-based drug test gives an employer a bit of a history on the employee's drug use, but a saliva test is more about whether the employee is under the influence at that moment," he added.

A saliva test can screen for drug use for three to 24 hours after drug use depending on the amount and type of drug consumed.

This form of testing is less invasive of the employee's personal life and will be particularly useful if marijuana is legalised. Evans said: "If marijuana is legalised, it will be like alcohol. Employees will be able to use it, but will not be able to come to work intoxicated." He added that it is better for employers to be prepared before the legislation is passed.

Finally, Evans advised companies to vet their choice of supplier. While affordable, quality products are important, the supplier should also be able to assist with drawing up a substance-abuse policy.

"The supplier should be able to do this free of charge. Some companies supply affordable drug testing equipment, but then charge a fortune to write a substance-abuse policy," Evans noted.

He added: "ALCO-Safe has so much experience that we actually have templates to suit specific environments. We encourage a company to give its own input and offer assistance in drawing up the policy, provided our products are used."

Throughout the Expo, delegates could attend various free seminars managed by the Institute of Safety



Management (IOSM) and the South African Protective Equipment Marketing Association (SAPEMA). The sessions were often overflowing with delegates, who happily stood through an entire 45-minute presentation. The topics ranged from new OHS legislation to innovations in PPE.

This year, the A-OSH Expo, in partnership with Securex South Africa, hosted the South African Guide-Dogs Association for the Blind (SAGDA) as its charity partner.

Smit said: "A trained guide dog helps its owner to avoid obstacles, prevent accidents and find destinations. A guide dog becomes a constant companion to a visually impaired person, enhancing their quality of life, providing a measure of independence and mobility as well as offering unconditional love and companionship."

Mmabatho Koena, marketing coordinator at SAGDA, noted that the Association aims to provide any visually impaired person, regardless of their financial position, with a guide dog. Therefore, these individuals pay only R100 towards the board and lodging for the dog's two-week stay at SAGDA for training. They can also purchase a dog for as little as five rand.

It costs the Association about R100 000 to train a guide dog. The SAGDA team aimed to raise funds for the Association at the A-OSH Expo by selling raffle tickets and soft-toy puppies. The puppies-in-training were also in attendance at the Expo.

Smit concluded: "The A-OSH and Securex Expos bring real value to professionals who work in these fields. The shows have become valuable additions to their working calendars for the learning and networking opportunities that they bring. We look forward to continuing the growth of Securex South Africa and A-OSH Expo next year." SM

MAKE THE SWITCH TO ISO 45001 SIMPLE

SGS South Africa – a leading inspection, verification, testing and certification company – highlighted its ability to assist companies to make a smooth transition from the OHSAS 18001:2017 standard for occupational health and safety management systems (OHSMS) to the recently passed ISO 45001 standard.

In March, the new ISO 45001 standard was published as the globally recognised OHSMS standard. While there remain some similarities between the two standards, ISO 45001 adopts the Annex SL top-level framework of all new and revised ISO management system standards.

This new standard sets out key requirements for managing occupational health and safety and is a tool for facilitating improvements in overall health and safety

performance. It encourages more internal and external stakeholder focus as part of the adoption of a risk-based approach to health and safety management.

SGS South Africa can offer its support to companies in their transition to ISO 45001 by providing training in awareness, implementation, as well as internal auditor and lead auditor training to understand the new requirements. Risk-based thinking and empowering leadership training is also available.

"On request, we can provide gap analyses, which can be used to highlight the changes that will need to be made for migration from OHSAS 18001 to ISO 45001 certification," says Lizelle Swart, business development manager at SGS South Africa.

She advises companies preparing for the shift to download the SGS Readiness Checklist online and consider obtaining a copy of the new standard. They should then go about setting a strategy and engaging stakeholders, developing an implementation plan and reviewing the systems for the management of outsourced products and services.



SCAN HERE FOR MORE INFORMATION



ST JOHN DRAWS A CROWD AT A-OSH

The St John South Africa exhibit at the health and safety exhibition, A-OSH Expo, promoted the numerous services offered by the organisation, which brought many delegates to the stand.

St John offers various services of which training is its core business. This was also the focus of the organisation's stand. Chris Martin, business development manager at St John, noted: "In terms of positioning the St John brand, it is very important for people to be aware of the core business, which consists of training in first aid, home-based care, occupational health and safety (OHS) and the relevant courses around OHS.

"Although the St John brand has been around in South Africa for 135 years, people often fail to see where the organisation fits in." The A-OSH Expo also gave St John the opportunity to meet up with both current and potential customers.

"There are many of our clients in attendance. We want to use the opportunity to leverage the brand and showcase our new products," Bheko Hlengwa, marketing officer for training at St John, explained. One of these new products is a one-year national certificate in occupational health, safety and environment.

St John has attended A-OSH for three years. Its motivation to return each year is the number of visitors to its stand. Hlengwa stated: "We've attended a few other events, but at A-OSH the atmosphere is always good. It is worthwhile for St John to be here."

Martin echoed his co-worker saying: "I've been pretty overwhelmed by the kind of response we've had. Many



delegates recognised the brand from training they received while still at school. It is great to see that the brand has stayed with them and that it brought them to our stand.

"We didn't have the biggest exhibit, but we had a lot of traffic. We even ran out of cards a couple of times, and that is exactly the kind of response we were looking for."

He concluded that St John will definitely return to A-OSH.



FEM GIVES BACK

THE FEDERATED EMPLOYER'S MUTUAL (FEM) ASSURANCE COMPANY IS GIVING BACK TO THE INDUSTRY AND THE COUNTRY BY SPONSORING THE EDUCATION OF SELECTED LEARNERS. SHEQ MANAGEMENT LEARNED MORE ABOUT THE SCHOLARSHIP AT THE A-OSH EXPO

FEM returned to the annual occupational health and safety (OHS) exhibition, A-OSH Expo, in May. The organisation, which has been operating in South Africa since 1936, provides workmen's compensation to the construction industry.

"Our presence at A-OSH has been to get the FEM brand out there. Many construction contractors aren't aware that they have a choice for workmen's compensation. FEM works under license to government and offers merit rebates to companies with good health and safety practices. These companies can get up to 50 percent of their premium paid back annually. We also make use of a network of private South African hospitals to treat patients," explained FEM marketing and communications manager, Herman Enoch.

FEM currently provides services to the majority of companies in the construction industry. It has been involved in A-OSH for four years and returns each year to interact with the visitors.

"The A-OSH Expo traditionally attracts all the OHS personnel from construction companies. There have certainly been more feet this year. Generally, the construction industry is focusing more on health and safety. As a result, A-OSH gets more exposure and is now attracting more senior personnel to the exhibition," Enoch stated.

"This is good, as buy-in from the whole company is needed in order to have an effective health and safety system," he added.

The FEM Education Foundation partnered with the Make a Difference (MAD) Leadership Foundation to offer the MAD Leadership Scholarship, which formed a focal point of the exhibition.

This is a full scholarship offered to South African students from Grade 7 to 12. It covers the cost of private schooling and university fees, along with any additional costs such as boarding and textbooks.

Learners with an academic performance of more 65 percent, a good comprehension of English, a strong value system, leadership qualities and an involvement in


community service activities are encouraged to apply.

The learner must come from a household with a combined income of no more than R25 000 per month. Applicants go through a rigorous testing process, which includes written exams and interviews.

"It is a fantastic, once-in-a-lifetime opportunity. Learners have the chance to get the best schooling and attend the best universities. The FEM Education Foundation is looking for overachievers; learners with leadership qualities and above-average grades, who really stand out from the crowd," Enoch explained.



"The Foundation will look for the best private schools and universities closest to where the scholarship recipients live. During the course of the scholarship, learners need to maintain their grade average. They are allowed to study any degree of their choice. The scholarship is aimed at benefiting the industry and country as a whole," Enoch concluded.

Applications for the MAD Leadership Scholarship for 2019 close on June 30. 

FIND OUT MORE ABOUT THE MAD LEADERSHIP SCHOLARSHIP



LEGALITIES MADE SIMPLE

Keeping an eye on all the changes to the various compliance standards and regulations can be a challenge. Sabinet promoted its Sabinet Legal Register, in partnership with Cape Town-based Libryo, at the A-OSH Expo.

The Sabinet Legal Register is an easy-to-use platform aimed at supporting occupational health and safety (OHS), risk or compliance managers, as well as in-house legal teams to be compliant with legislation.

The platform offers OHS managers a site-specific legal register of all the sections of legislation with which they need to comply, as well as with information on how to comply. A live chat function is available to support managers when using the platform.

Clients can also customise the laws on which they wish to focus in the Register, such as the OHS, environment or food health and safety laws. It takes as little as five days for newly passed laws to reflect on the Register.

The platform was specifically designed with the compliance specialist in mind. It features an intuitive search function. For example, if a manager searches the word "ladder", all the legislation surrounding working at height will appear, despite the word ladder never appearing in legislation.

Clients pay a once-off installation fee for setting up the Sabinet Legal Register, along with an annual maintenance fee for keeping the register up to date.

"Staying updated on the legal compliance requirements can be quite an intense job and not everyone can keep



their head above water. We take away that stress and offer clients a tool that focuses on national and provincial legislation as well as municipal bylaws. We believe that a company can only be truly compliant when all the levels of compliance are taken into account," said Lynn Midlane, product manager at Sabinet.

Sabinet has been attending A-OSH Expo for the last three years. "The reason we come back each year is for the numerous successful leads we make from the expo. The presentation and layout are definitely getting better each year," stated Midlane.

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MINER SAFETY – WHERE TO FROM HERE?

“ZERO HARM” WAS WIDELY WELCOMED AS A TARGET BY THE MINING INDUSTRY. HOWEVER, DESPITE CONSIDERABLE IMPROVEMENTS, MINING FATALITIES REMAIN UNACCEPTABLY HIGH. MARELISE VAN DER MERWE FROM DAILY MAVERICK ASKS WHY

At the end of 2017, headlines ran announcing that, for the first time in a decade, the mining death toll in South Africa had risen. By March 2018, the death toll for the year had risen to 22. In May it reached over 30.

The spike to 33 followed 13 miners being trapped in Sibanye-Stillwater's Driefontein mine in Carletonville, Gauteng, after a seismic event. Seven miners died and another six were injured. The following day, reports noted that two more seismic events followed the first.

The next day, Solidarity's deputy general secretary for occupational health and safety, Paul Mardon, said that, although Mineral Resources Minister Gwede Mantashe had not yet released the official health and safety figures for mines in 2017, provisional indications were that at least 86 miners died in South Africa in 2017, up from 73 in 2016, 77 in 2015, and 84 in 2014.

Mining fatalities hit a dramatic high in 1995, with a total death toll of 500, and decreased again over the next ten years to 199 in 2006.

Mining disasters are typically followed by calls for greater attention to miner safety, and in 2003 the target of “zero harm” was widely adopted. While overall fatalities have reduced dramatically, major and stubborn problems remain – and for miners, the work remains hazardous.

“Zero harm” has been widely welcomed by unions and companies alike. In 2012, Anglo American spoke of its own commitment to a “zero harm” target at its Annual General Meeting, which a column in *Financial Times* described as “achievable”.

“Both [Anglo's] chairman Sir John Parker and chief executive Cynthia Carroll admitted at its recent annual general meeting [that] it is an ambition that still remains tantalisingly out of reach,” the column read.

“But a 57 percent reduction in fatalities across one of the world's leading mining companies has been achieved over the past five years, with a particular emphasis placed on tackling unsafe behaviour at its platinum operations, centred in South Africa, that employ 30 000. And as Ms Carroll noted, demonstrating that ‘zero harm is achievable in all parts of the organisation’ remains a key corporate objective.”


The South African Chamber of Mines, meanwhile, states on its website:

“The South African mining industry is committed to the principle of ‘zero harm’, with the goal that every mineworker should return home unharmed every day. The Chamber, in conjunction with mining companies, aims to achieve a world-class safety performance by working in close collaboration with tripartite partners in government and organised labour.”

It adds: “Much has been achieved in recent years, with employers, labour and government working together to protect the safety and health of all mine employees.”

Outside of this, calls for greater attention to health, safety and empowerment have continued – and, as may be expected, spike when there are fatalities. The Mine Health and Safety Council has called for greater engagement between the Department of Mineral Resources and all stakeholders in the mining industry, including mining communities, on issues affecting them.

At the time of the Sibanye-Stillfontein disaster, President



Cyril Ramaphosa vowed that the mining charter would be finalised "very soon" and that a deadline had been set, although he did not specify what this deadline was.

After the disaster he added his commiserations over the deaths of the Sibanye miners. "We also offer our best wishes to workers who have been directly or indirectly affected by this disaster, which should move the mining industry and government to jointly find ways to do all we can to protect our nation's most valuable resource – the workers who are at the heart of our economy," he said.

"We should spare no cost and no collaboration to ensure that workers are safe, and their families are adequately cared for and compensated when disaster and tragedy strike."

He added that he hoped investigation into the deaths would identify the causes, which, in turn, could lead to solutions that could help address the unacceptably high death rate in mining in South Africa.

All of which speaks to improvement. It is, however, also startlingly familiar. Data from around the world in general, and South Africa in particular, suggests that safety for miners remains – at least to some extent – a pipe dream. Despite overall improvements in the fatality rate in South Africa throughout the mining sector, dangers have persisted.

Some analysts predicted this. In 2012, an analysis in *Daily Maverick* noted: "In 2003, representatives of the South African mining industry – employers, labour unions and government – set historic and significant milestones for health and safety to be reached by 2013 – 'zero harm' for all employees.

"The CEOs of more than 30 companies determined that 2013 would be the year in which South Africa's mine safety would be on par with the mine safety in industrialised countries like Canada, the United States (US), Australia and the United Kingdom.

"In an industry better attuned to profits and production, this emphasis on safety is welcome. It is long overdue, but with 2013 looming large and fatalities still a reality of the mining experience in South Africa, 'zero harm' appears to be up for creative interpretation."

The analysis further argued that some of the goals set – because they drew on international standards – did not adequately allow for South Africa's unique context.

"For Gold Fields, for example, 'zero harm' has meant that instead of accepting the risks involved in gold mining as 'inherent', employees and managers are schooled into believing that, with the right approach and mentality, mining can be rendered safe.

"However, even as Gold Fields insists their goal of 'zero harm' was more than an empty aspiration, but rather an achievable goal, statisticians warn that 'zero harm' in the workplace is impossible...

"The National Union of Mineworkers (NUM) continues to endorse the policy even as concerned analysts, psychologists and statisticians argue that that there is no such thing as 'zero harm' – the elimination of workplace accidents will never be achieved."

Many of South Africa's mines, after all, are unusually deep and, therefore, prone to seismic events – making them some of the most dangerous in the world. "South Africa has

a chequered record of safety compared with other large industrialised countries, in part because its mines are so deep," the *BBC* phrases it.

Fin24, meanwhile, reports that the continued high number of fatalities is at least partly down to a failure to modernise.

"The country [South Africa] has been mined commercially for over a century and many operators still rely on older, labour-intensive mining methods such as hand drilling," the report reads.

Other factors are at play, too. Worldwide, South Africa is in line with generally typical patterns, though the number of fatalities per country varies. Overall, fatalities have been on the decrease, but this has begun to change in the recent past. The International Council on Mining and Metals noted in 2017 that the mining industry globally had started to decline – both in terms of value and safety.

Historically, the worst offenders worldwide, in terms of mine safety, have been described as countries where profit comes before people. The *BBC*, citing International Labour Organisation data, has noted that while mining employs just one percent of the world's workers, it is responsible for eight percent of its fatalities. This, it argued, was part of a "dark industry".

We know that the majority of mining deaths occur in developing countries, but that even the US saw an average 93 people dying in mining accidents during the period 1991 to 1999, in addition to a staggering average of 21 351 injuries per year. A Geneva-based trade union federation estimates there are 12 000 mining fatalities per year worldwide, and that many go unreported.

Where fatalities had been decreasing prior to the recent spike, the *BBC* noted, there had been "a few exceptions, like China and Russia".

Alan Baxter, a Fellow of the Institute of Materials, Minerals and Mining, said this was a function of profit-seeking. China has the world's largest mining industry, producing 40 percent of the world's coal and accounting for 80 percent of its related fatalities. "They are maximising revenue," Baxter said.

This is also significant because it raises the question of whether declining profits may encourage slips in safety standards, as companies increasingly try to keep up in an industry that is inherently unsustainable.

It's an important question, too, because safety does not always come cheap. Khadija Patel's earlier analysis in *Daily Maverick* noted that when "zero harm" was first adopted, although it was widely welcomed, its impact was felt in performance.

"In May this year, Susan Shabangu, Minister of Mineral Resources, hailed the safety crackdown on the South African mining industry – a crackdown that has included a surge in inspections, and stoppages for safety violations – pointing out that the number of fatalities was reduced to three in April, down from an average of 11 or more a month," Patel wrote at the time.

"The crackdown has, however, been felt in output. Data for February [2012] indicates that production of platinum group metals (PGMs) fell 47.6 percent while gold output fell 11.5 percent in volume terms in February. Total mineral production was down 14.5 percent compared with the same

month last year. And not all mining companies are happy to prioritise safety over production."

Both the NUM and Association of Mineworkers and Construction Union (AMCU) have raised concerns over this issue following the Sibanye-Stilwater disaster.

"We believe, as AMCU, that management pushed the boundaries in terms of production and profit," said AMCU president Joseph Mathunjwa.

"Because the first seismic event was huge, they were supposed to withdraw all the workers and direct them to a waiting place and give it one or two hours.

"I asked the management why they didn't do it. They said the distance [between the seismic event sites] was 2,1 kilometres ... But after the 3,5 event happened they rushed to withdraw the proto team from the rescue area. You can see clearly the mineworkers' lives are very cheap," Mathunjwa said.

Meanwhile, NUM spokesman Livhuwani Mammburu, has raised the dual issue of poor pay for miners, and mines prioritising profits over safety. "Miners were encouraged to go into dangerous areas by being offered bonuses to do so," Mammburu said.

Yet it's not a zero-sum game. Each time there is a disaster in mining, the losses are not only to human life. Reversals in safety trends can result in investor concerns over mine safety and prompt increased shaft inspections and costly production stoppages. This means that, in the long term, prioritising safety and well-being for mineworkers can have

longer-term benefits for production, not only for the miners.

When mining-related deaths in South Africa increased for the first time in nearly a decade in 2017, Anglo American Platinum CEO Chris Griffith, who heads the Zero Harm Forum, expressed his concern. He said the mining sector, government and labour needed to "accelerate initiatives that could improve this unacceptable [safety] performance".

Perhaps the key question is not only how these deaths are occurring, but why. Is it that South African mines are unusually dangerous? Is it, as the unions say, that miners are being encouraged to go into more dangerous areas in already hazardous, deep mines?

Is it that outdated methods and equipment are being used to do this already hazardous work? Is it that miners are so poorly paid that they'll do anything to earn a little more? Is it that despite the best intentions of the policies and principles, these aren't being carried out on the ground? Or is it a perfect storm?

Until we find those answers, there may be improvements, but "zero harm" will remain unattainable. And we will continue to say, with an increasing sense of déjà vu, that something must be done. SM

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PUTTING QUALITY FIRST- AT WHAT COST?

A TOUR OF THE FACTORY OF MARLEY PIPE SYSTEMS, A SAPPMA MEMBER, HIGHLIGHTED THE IMPORTANCE OF QUALITY TESTING FOR COMMERCIAL PLASTIC PIPES AND THE ISSUES THAT HAVE CAUSED A REDUCTION OF QUALITY IN THE INDUSTRY. MARISKA MORRIS REPORTS

The Southern African Plastic Pipe Manufacturers Association (SAPPMA) was established in 2004 to address the ethics and quality of commercial plastic pipes for various applications, such as irrigation and water distribution. The organisation performs quality audits to ensure accountability and compliance with standards bodies and the minimum standards required by SAPPMA.

Its main concern is the service life of pipes for use in the long term. SAPPMA members include various parts of the commercial plastic-pipe industry, with about 17 pipe manufacturers accounting for 80 percent of the pipes manufactured in South Africa.

The frequency of SAPPMA quality audits depends on the performance of the manufacturers, but they take place at least every three months.

SAPPMA CEO, Jan Venter, notes: "If we pick up something suspicious, we will increase the number of visits." One of SAPPMA's members is Marley Pipe Systems. On May 9, SAPPMA visited the company's factory in Rosslyn to highlight the importance of quality testing.

However, Brett Kimber, Marley Pipe Systems MD, pointed out how price has caused a decline in the quality standards of the industry. He said: "South African plastic pipes sell for less than their international counterparts. The price of the raw material increased by 75 percent from 2012 to 2016, while the selling price increased by only 25 percent."

He added that manufacturers have to absorb the additional costs. Some companies have resorted to unethical practices in order to still make a profit, including using post-consumer (scrap) plastics in products. Post-consumer plastic often

includes weaker, low-grade polymer. This reduces the longevity and quality of the pipes.

Pipes constructed from pipe-grade polymer last for 50 to 100 years. Replacing pipes is expensive and often very disruptive. Low-grade pipes don't have the same longevity. Toxicity does not form part of the SAPPMA quality tests, as the national standards don't allow for the use of post-consumer plastics in potable water applications, which means that the organisation would not pick up on scrap material used in pipes.

It is, however, working towards regulations to reduce price variations. Marley Pipe Systems has invested heavily in its own testing, which includes a hydrostatic (water-based) test, where the pipe is placed in 20°C and 80°C water for 160 to 1 000 hours, to determine its life expectancy.

Many of these quality tests are destructive. The sample products, along with rejected products, are recycled at the Marley Pipe Systems factory, but as the manufacturer uses in-house unprocessed and/or in-house generated recycled polymer, Marley pipes can be recycled and used in smaller, 40-mm to 110-mm pipes designed for non-pressure applications, subject to the materials complying with the minimum raw-material standards.

These pipes are tested at the factory to ensure that the material used still has the required properties to comply with the standards. Although Marley Pipe Systems puts quality first, it might not be enough.

"The company's business model is not sustainable, because we refuse to use post-consumer plastics. We won't compromise on quality, but this may affect the size of the company going forward," Kimber concludes. SM

IN A SHAMBLES



DRIVERS IN THE MINIBUS-TAXI INDUSTRY ARE FACED WITH VARIOUS CHALLENGES, WHICH SOMETIMES LEAD TO RECKLESS DRIVING. WE LOOK AT THE ONGOING STUDY BY LEE RANDALL, AT THE STEVE BIKO CENTRE FOR BIOETHICS AND HEALTH LAW, AT THE UNIVERSITY OF THE WITWATERSRAND, AND DISCOVER ALARMING FINDINGS REGARDING ROAD SAFETY IN JOHANNESBURG

According to Arrive Alive, there were 201 accidents and 291 fatalities involving minibus taxis in 2013. The number decreased in 2015, resulting in 191 accidents and 84 fatalities. However, that does not

excuse the high levels of ongoing malpractice in the industry. According to the government, there are more than 200 000 minibus taxis on the road, with some 5.4-million journeys made daily. The taxi industry generates about R40 billion per year and has created approximately 300 000 job opportunities. The industry should, therefore, have a robust approach to ensure safety on the roads.

The study in question focused on the behaviour of drivers and road safety in the Johannesburg minibus-taxi industry. Fifty minibus-taxi drivers in 20 ranks were surveyed to find out about their working conditions and how those could influence their driving habits.

MOST COMMON ROAD LAWS VIOLATIONS

In the study: *Coffins on Wheels: A bioethical study of working conditions, driver behaviour and road safety in the Johannesburg minibus-taxi industry*, Randall reveals that driver-related factors play a big role in crashes in general.

"Many taxi drivers acknowledge that they break the law, but they point out that this is strongly related to their

working conditions and the pressure they experience in trying to earn their livelihoods," notes Randall.

CAUSE OF CRASHES

Randall says that excessive working hours and fatigue are huge crash risks. Having highly fatigued drivers transporting a dozen or more people at a time is an unacceptable safety breach. Randall mentions that there are reports on taxi drivers who work while intoxicated. The other violations revealed in the study include driving taxis that are old.

She explains: "While about a quarter of the survey respondents report that they drive taxis that are less than five years old, 50 percent drive taxis that are five to 11 years old, and another quarter drive taxis older than 11 years."

The other alarming issue is vehicles driven with defects. "The most common are problems with headlights, windscreens, doors, seats, tyres and brakes," she adds.

THE KILLER QUANTUM WIDELY USED

Another finding indicates that the vast majority of drivers use vehicles that are not designed to carry passengers.

Randall comments: "Media reports a while back referenced 'Killer Quantums'; Toyota Quantum panel vans that some taxi owners had inappropriately converted to minibus taxis,

since the panel vans are cheaper to purchase. The problem is that the floors are not sufficiently reinforced. As a result, injuries that occur during crashes can be amplified, due to the seats coming loose from their moorings."

UNFAIR PAY AND WORKING HOURS

The study suggests that the sectoral determination introduced for the taxi sector in 2012 has had an effect, as the majority of the drivers involved in the study reported receiving a weekly wage as opposed to a small portion of the day's takings.

"On average, a driver earns R3 000 to R4 000 per month, which works out to an extremely low hourly rate when considering that most drivers reported working 15 hours per day. Their effective hourly earnings are well below the minimum wage specified in the sectoral determination, and even further below the new national minimum wage of R20 per hour, which is being introduced this year.

"The Department of Labour (DoL) should be intervening to bring the drivers' working conditions into line with the Basic Conditions of Employment Act (BCEA) and their wages in line with the sectoral determination," she says.

FORMAL EMPLOYMENT NEEDED

Randall comments that of all the drivers she surveyed,


only a third have employment contracts and payslips, which are legally required. "By law, the taxi owners are also supposed to pay UIF contributions and Workmen's Compensation premiums. The research suggested that this seldom happens."

There are many other violations that contribute to road accidents. These include drivers not being paid for annual or sick leave and other responsibilities, which are covered in the BCEA.

More can be done by government and the DoL, together with drivers and taxi associations, to improve safety and working conditions for minibus-taxi drivers in Gauteng. Randall suggests that driver training would help.

"The National Transport and Safety Authority in Kenya introduced a detailed driver training curriculum, which contains a specific section for drivers of public-service vehicles including minibus taxis.

"The training covers a range of topics including: how to inspect a vehicle, controlling the vehicle, how to render first aid, how to drive defensively and how to give good customer service.

"I think we need something similar in South Africa, and the drivers who were part of the study expressed willingness to participate," she concludes. 

Safety is a journey, not a destination.



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QUICK HELP WHEN ITS NEEDED MOST

HAVING THE CORRECT HEALTH INFORMATION AT HAND AND BEING ABLE TO QUICKLY CONTACT EMERGENCY MEDICAL SERVICES (EMS) COULD MEAN THE DIFFERENCE BETWEEN LIFE AND DEATH IN AN EMERGENCY. SHEQ MANAGEMENT EXPLORES INNOVATIVE SOLUTIONS

By their very nature, emergencies are unexpected and can happen anywhere, at any time. One cannot expect that an EMS professional or qualified first-aid-er will always be around in the case of an emergency. It is, therefore, a good idea to have some sort of reference plan should such a situation arise. It could mean that, during those critical minutes until emergency services arrive, a life could be saved

Today this is much easier to accomplish. Thanks to modern mobile-app technology, there are several general and specialist first-aid and emergency apps one can download to a smart device. These provide fast, trusted advice for minor and serious cases. Here is a list of just some of the apps available:

CPR 11

Designed for use on the sports field, CPR 11 provides clear and precise instructions on how to give compressions and ventilations correctly, how to handle an automatic external defibrillator (AED) and, if necessary, how to transfer the casualty in the case of sudden cardiac arrest (SCA).

"The 11 short videos will help you recognise a SCA and meet the objective of starting resuscitation manoeuvres in the first two minutes, and early defibrillation in the first three minutes after the collapse of the player.

"The application's design takes into account some of the specific characteristics of SCA cases during contact sports, like taking special care of the cervical spine when handling the player," the developers state.

Pros: Comprehensive, immediate response measures

Cons: Only offers CPR guidelines for SCA

Platform: Apple, Android and Windows



MySOS

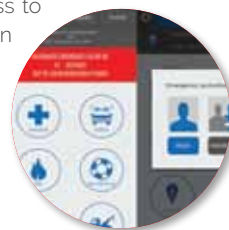
MySOS is billed as "a one-stop shop for access to the closest and most appropriate emergency services in South Africa". According to the developers, the app offers access to appropriate emergency assistance when users don't know who to call, don't know where they are, want to notify their mySOS contacts about the emergency and the exact location, and want the SOS services to navigate directly to the location in an emergency.

The app also offers contact details for doctors, hospitals, pharmacies, dentists, vets and police stations. The Track Me feature can be used to track any journey and automatically send out a detailed SOS notification should certain parameters be breached.

Pros: Links via Bluetooth to a mobile panic button (separate purchase), free to download

Cons: Continuously runs GPS and features use data

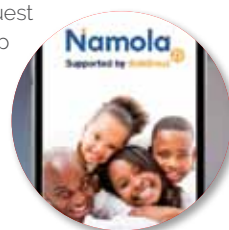
Platform: Apple and Android



NAMOLA

The Namola app allows users to request emergency assistance and to alert up to five emergency contacts. When the user requests assistance through the app, trained control-centre operators verify incident details before assisting in the deployment of the correct emergency responders.

The app also allows users to receive details of an incident should they be listed in someone else's emergency contacts. Users can join a chat group with the person who requested assistance, the control room, and other emergency contacts who were alerted.



Pros: Instant incident location through GPS, free to download
Cons: Request for assistance only
Platform: Apple and Android

SNAKEBITE FIRST AID SOUTHERN AFRICA

This app will help with descriptions and identification of 23 dangerous and venomous snakes (including spitting snakes) in southern Africa. It offers practical, illustrated, step-by-step first-aid advice on what to do if someone is bitten by one.

Other features include high-quality photos, maps and succinct information about snake habits and habitats.

Pros: Includes emergency contact numbers
Cons: Priced from R79,99
Platform: Apple and Android

SOUTH AFRICAN RED CROSS SOCIETY (SARCS)

The SARCS app links users with the organisation and with other app users from around the world. It provides instant information and news about SARCS and its activities and specific



projects, as well as current events.

Through the app, users can get information on courses offered by the SARCS Training Department and enrol in these courses. They can also sign up to become a volunteer for SARCS and engage in various activities.

Pros: Receive emergency alerts, free to download
Cons: No practical first-aid or emergency advice
Platform: Apple and Android

ST JOHN AMBULANCE FIRST AID

This app includes the latest first-aid advice and protocols for dealing with emergency situations, offering simple illustrated guides and voice instructions.

St John warns that the app doesn't replace the benefits of learning first aid, nor is it as in depth as a full first-aid manual. "When there is an emergency, it will help users to know what to do in those first few crucial moments when basic knowledge of first aid can make the difference," the company states.

Pros: Free to download
Cons: Based on United Kingdom protocols
Platform: Apple and Android



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CYBER ALERT!

WHAT IS THE GREATEST RISK THAT BUSINESSES CURRENTLY NEED TO MANAGE? THE RISKS ASSOCIATED WITH CYBER INCIDENTS, REPORTS CHARLEEN CLARKE, AFTER STUDYING THE ALLIANZ RISK BAROMETER 2018

We love it and – thanks to the inherent risks it represents – we also hate it. I am, of course, referring to the internet, which has changed life as we know it. Undoubtedly the greatest invention of the 20th century, the internet comes with a multitude of risks.

Cyber incidents are paramount and, according to the findings of the seventh Allianz Risk Barometer, which is published annually by Allianz Global Corporate & Specialty (AGCS), cyber incidents remain the top threat to South African businesses today – with 38 percent of responses for the third year in a row. The 2018 report is based on the insight of a record 1 911 risk experts from 80 countries.

Business interruption (BI) is the second most-prevalent risk – at 34 percent – while changes in legislation and regulation occupied the third place at 29 percent.

The report unveils two new South African business threats that have emerged as part of the top ten list, namely climate change/increasing volatility of weather, and loss of reputation or brand value, both at 16 percent (and occupying position number eight).

These new threats are not surprising, especially given the extreme weather patterns that have resulted in frequent droughts and floods affecting the country.

Market developments as a threat declined slightly to fourth place at 23 percent (from third place in 2017). Fire, explosion and new technologies, in sixth place, are both at 19 percent. The former is not surprising, given the recent fires in the Durban Harbour, Braampark and Knysna.

South Africa is not alone in its concern about cyber incidents. Multiple threats – such as data breaches, network liability, hacker attacks or cyber BI – ensure it is the top



business risk in the Americas region, while occupying the number two spot in Europe and the Asia Pacific region. It also ranks as the most underestimated risk and the major long-term peril.

Cyber incidents – through events such as WannaCry and Petya ransomware attacks – brought significant financial losses to a large number of businesses. South African businesses were not left unscathed. In October last year, the personal information of more than 30-million South Africans was exposed online in what is considered the country's biggest data breach. The bad news is that the potential for so-called "cyber hurricane" events to occur, where hackers disrupt larger numbers of companies by targeting common infrastructure dependencies, is expected to continue to grow in 2018.

"South Africa is reported to have the third-highest number of cyber-crime victims worldwide, losing billions of rand a year to cyber attacks and experiencing more cyber attacks than its African counterparts.

"Although, cyber awareness has significantly increased, particularly among small and medium-sized businesses, it is more challenging for these enterprises to tackle this issue compared to larger corporations," Nobuhle Nkosi, cyber insurance expert at AGCS Africa, tells SHEQ MANAGEMENT.

Cyber risk and BI have been neck-and-neck in South Africa for the past three years, increasingly demonstrating a strong link between the two.

"Businesses in South Africa are deeply concerned about the impact of BI, which could result from traditional exposures, such as fire, natural disasters and supply chain disruption, to new triggers stemming from digitisation and interconnectedness that typically come without physical damage, but with high financial loss.

"Breakdown of core IT systems, terrorism or political violence events, product quality incidents or an unexpected regulatory change can bring businesses to a temporary or

prolonged standstill with a devastating effect on revenues," says AGCS Africa CEO Thusang Mahlangu.

BI can have a tremendous effect on a company's revenues, yet its impact is one of the hardest risks to measure. It is also the most important risk for the sixth year in a row globally, ranking top in 13 countries in Europe, Asia Pacific, and Africa and Middle East regions.

"No business is too small to be impacted," explains Mahlangu, "A severe interruption can even have a terminal impact, particularly for smaller companies. However, as many businesses transition from being rich in physical assets to deriving more value from intangibles and services, increasingly, BI is being triggered by non-traditional risk

“ Although there may be fewer smaller losses, due to automation and monitoring minimising the human error factor, this may be replaced by the potential for large-scale losses, once an incident happens.

exposures, which don't cause physical damage, but can result in lost income – so-called non-damage business interruption (NDBI)."

Natural catastrophes moved from number seven to number four and also returned to the top three business risks globally.

"The impact of natural catastrophes goes far beyond the physical damage to structures in the affected areas. As industries become leaner and more connected, natural catastrophes can disrupt a large variety of sectors around the world that might not seem directly affected at first glance," says Ali Shahkarami, head of catastrophe risk research at AGCS.

Meanwhile, the risk impact of new technologies is one of the big movers in the Allianz Risk Barometer, up to number six from number ten. It also ranks as the second top risk for the long-term future after cyber incidents, with which it is closely interlinked.

Vulnerability of automated, or even autonomous or self-learning machines to failure, or malicious cyber acts, such as extortion or espionage, will increase in future and could have a significant impact if critical infrastructure, such as IT networks or power supply, is involved.

"Although there may be fewer smaller losses, due to automation and monitoring minimising the human error factor, this may be replaced by the potential for large-scale losses, once an incident happens," explains Michael Bruch, head of emerging trends at AGCS.

"Businesses also have to prepare for new risks and liabilities as responsibilities shift from human to machine, and therefore to the manufacturer or software supplier. Assignment and coverage of liability will become much more challenging in future." SM

A SNAPSHOT OF TOP RISKS TO SOUTH AFRICAN COMPANIES IN 2018

POSITION 1: Cyber incidents (also first in 2017)

POSITION 2: Business interruption (also second in 2017)

POSITION 3: Changes in legislation and regulation (fifth in 2017)

JOINT POSITION 4: Market developments (third in 2017) and natural catastrophes (seventh in 2017)

JOINT POSITION 6: Fire and explosion (sixth in 2017) and new technologies (10th in 2017)

JOINT POSITION 8: Climate change (unplaced in 2017) and loss of reputation or brand value (unplaced in 2017)

POSITION 10: Macroeconomic developments (third in 2018)



AVOIDING THE BIG C

CONFLICT BETWEEN EMPLOYEES MAY RESULT IN UNNECESSARY STRESS AND UNPRODUCTIVITY AND COULD EVEN LEAD TO PHYSICAL HARM. IT IS, THEREFORE, IMPORTANT FOR EVERY MANAGER TO BE EQUIPPED TO MANAGE EMPLOYEE CONFLICT

By retaining employees over the long term, companies can increase productivity and generate more profits for the company. Matt Dodaro, thought leader at Enterprise Software and InsureTech in the United States (US), notes that a third of new hires quit after six months with the same number knowing whether they would stay at a company within their first week.

"Some 32 percent of employers say they expect employees to job-hop," Dodaro says. Jared Lafitte, in his article for *Forbes*, explains that the culture of a company has the biggest influence on the retention of employees.

He notes: "A healthy culture makes people feel connected, motivated and focused. An unhealthy culture, on the other hand, creates tension, a lack of clarity and disillusionment." Even if the culture of an organisation is healthy and inspires its workers, the interpersonal relationships at the office could greatly impact the retention of quality employees.

Reche Naidoo, management consultant and senior analyst at Accenture, states: "It is inevitable that individuals who work together for several hours a day will experience conflicts in their relationships. These conflicts can lead to decreased productivity and reduced satisfaction in the workplace."

It is, therefore, important to have the correct management approaches or systems in place to ensure that the conflict

doesn't escalate. First, it is important to understand and be able to identify the various areas of conflict. David Wilkinson wrote for the *Oxford Review* about the four main areas of job conflict based on a study published in the *Isan Red Crescent Medical Journal*.

The first area of conflict is role interference or conflict. This occurs when people have multiple roles that don't fully align; employees have to achieve their different goals concurrently; there is not enough time for the employee to fulfil all their roles; and when the employee feels there is an imbalance in the roles they are expected to play.

Role ambiguity can also cause conflict as an employee may be unclear about what is expected and when; what the boundaries are; and when management is required to step in to assist with making decisions.

Wilkinson notes: "There is a lack of clarity about which decisions are the responsibility of the employee and which aren't. Part of this conflict also comes from a sense of having limited authority to make decisions."

Conflicting expectations between clients, employees, management and different departments can cause conflict especially if the leaders are not available (or able) to reconcile the different expectations. This relates to the goals set for projects, but also translates into work behaviour expectations.

"This happens, for example, where a colleague is a workaholic and constantly stays behind, working late and

creating the perceived expectation and pressure to conform to this standard," says Wilkinson.

Forced role engagement is the final area of conflict and occurs when there is inadequate staffing and employees are forced to fill in for others.

"Looking at these categories of conflict in the working environment, they appear to be largely down to the

who have engaged in company-sponsored mentoring," he explains. With a mentorship programme, a close relationship is formed between an employee and manager. This also creates a safe environment for employees to raise issues, including conflicts.

Walter Orechwa, founder of UnionProof – a learning platform to assist companies in avoiding union culture – echoes this idea. He feels that giving employees access to decision-makers in a company improves employee relations.

"Follow the lead of Tim Cook or L'Oreal Group chairman and CEO Jean-Paul Agon by eating breakfast or lunch with employees in the cafeteria or break room. This small act goes a long way in convincing people that management truly cares about employees, does not view itself as superior, and encourages open communication," he says.

This is not always possible for senior management, but it might be worth implementing



management. Recognising the issues and the effects of working conditions, like burn-out, intention to leave and lowering of morale, would be a good first step," Wilkinson adds.

While it could be easy to address some or all of these challenges, the interpersonal conflict and possible resentment caused between employees also need to be addressed.

When conflict arises, it is advisable for management to sit down with the employees involved and have a calm, open discussion. An employer should listen to the concerns of their employees.

Robert Thomas, employee and community relations manager at Hearthside Food Solutions, points to a long-term, ongoing mentorship programme as a great way to assist with managing employees and addressing conflict.

"As per a 2012 Deloitte Research Brief, retention is 25 percent higher for employees

a friendlier relationship between the employees and their site or floor manager.

Through a mentorship programme, managers will be able to provide employees with the skills to manage conflict and a direct avenue to management to discuss concerns, while managers will remain informed about any possible conflict that arises. SM



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SAFE DISPOSAL OF UNUSED PHARMACEUTICALS

GLOBALLY THERE ARE CONCERNS OVER THE LACK OF PROPER DISPOSAL METHODS FOR MEDICAL WASTE - PARTICULARLY UNUSED AND EXPIRED PHARMACEUTICALS - MOST OF WHICH ARE DISPOSED OF INCORRECTLY, POSING A HEALTH HAZARD FOR HUMANS AND THE ENVIRONMENT

According to the World Health Organisation (WHO), consumers and caregivers are encouraged to "remove expired, unwanted, or unused medicines from their homes as quickly as possible to help reduce the chance that others accidentally take, or intentionally misuse, the unneeded medicine, and to help reduce drugs from entering the environment."

More often than not, unused and expired medicines are either thrown in a trash bin, or flushed down the toilet. Although these methods of disposal are effective, they can also seriously affect water supplies.

An investigative report by the *Associated Press* (AP) found that trace levels of many common drugs were found in drinking water supplies throughout the United States (US), raising concerns about the impact that these may have on public health.

The report stressed that water supplies can become contaminated simply because unabsorbed medication in the body is passed by urine and other sources into wastewater. Moreover, most wastewater treatment plants fail to remove all traces of drugs.

"Flushing the old medications down the toilet is a guarantee that they'll end up in the water supply, and even throwing them in the trash means they are likely to end up in a landfill and eventually contaminate the groundwater, leading to medication contamination of lakes, rivers and streams," explains Dr Mohamed Mohsin, senior researcher at Global Medical Waste Management Market.

Both the WHO and the Global Medical Waste Management Market recommend that the most effective way to dispose of expired and unused medicine is through medicine take-back options.

With this method, unused and expired pharmaceuticals are given back to hospitals, clinics, pharmacies and drug enforcement agencies (DEA). In first-world countries such as the US, for example, the DEA periodically hosts national take-back events for prescription drugs, where temporary collection sites are set up in communities nationwide for safe disposal of prescription medicine.

Other take-back options include permanent collection sites set up by drug enforcement agencies to securely collect and dispose of pharmaceuticals.

According to the South African Pharmacy Council, there are a few safe ways to dispose of expired and unused medicines, the safest of which is through one's pharmacy. The best time to do this is during annual National Pharmacy Month in September, when pharmacists all over South Africa assist in responsibly discarding unused and expired medicine. Most pharmacies will, however, accept expired and/or unused medicine throughout the year.

It is also worth noting that the instructions inside or on the back of a medicine container should provide guidance on the best way to dispose of that particular medication. If these instructions are not available, it is best to check online, or to call the company that manufactured the medication to find out the best way to dispose of unused and/or expired pharmaceuticals. SM

THE ROAD TO PLASTIC RECYCLING



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THE WORLD HAS A PLASTIC PROBLEM. FACT. HOWEVER, A NOVEL INITIATIVE IS, QUITE LITERALLY, ON THE ROAD TO OVERCOMING THE PROBLEM

According to *National Geographic*, in the six decades since mass production of plastics began, more than 8.3-billion metric tonnes of the stuff has been created. Of that, 6.3-billion tonnes has become plastic waste, and, of that, only nine percent has been recycled.

In a 2011 article, the *New York Times* claimed that about 300-million tonnes of plastic is produced globally each year.

These are frightening numbers and so, too, is the fact that the vast majority of this plastic either lands up in landfills, or is left to litter the earth and its oceans. Only a small percentage is recycled or incinerated (which, itself, poses other environmental conundrums).

What about roads, then? Well, it is estimated that the world is covered by 40-million kilometres of roads (incidentally, South Africa is ranked tenth in the world, with a road network more than 940 000-km long).

The average road construction includes a mix of about ten-percent bitumen (also known as asphalt) which, while naturally occurring, is usually refined from petroleum. Road construction is the primary use for bitumen.

So, what if two problems – increasing the rate of plastics recycling and reducing the amount of bitumen refined from crude oil – could be solved at once? The concept of introducing plastic particles to the bitumen mix is becoming more widespread as more and more countries around the world investigate the possibilities of plastic roads. India and the United Kingdom (UK) are among the leaders.

In the UK, one of the pioneers is a company called MacRebur. The company produces three different recycled-plastic compounds. These recycled-plastic pellets, or flakes, are added to the bitumen and aggregate mix at between three and ten kilograms for every tonne of road mixture.


The result, according to MacRebur, is a huge increase in tensile strength of the road. This increases its resistance to deformation, rutting and cracking, which means that road maintenance is reduced, while its lifespan is increased. MacRebur claims that the roads are 60-percent stronger than those made with a traditional mix and ten-times longer-lasting.

Naturally, there are environmental advantages, too. Plastic waste is diverted from landfill, there is a reduction in fossil-fuel usage and a reduction in carbon footprint.

Good as this sounds, Dutch company VolkerWessels is taking the concept even further. It's PlasticRoad concept might still be in the design and modelling phase, but the company claims it will present numerous advantages.

Among these, the 100-percent recycled-plastic construction will allow for power generation, quiet road surfaces, heated roads and modular construction. Additionally, the PlasticRoad design features a hollowed-out space that can be used to run cables and pipes, and to divert rainwater.

The company is currently looking for partners to study the design's real-world practicalities.

With companies like MacRebur and VolkerWessels leading the way, the possibility of vastly reduced plastic waste and bitumen usage in road construction can only be a good thing. Here's hoping the concepts catch on! 

SCAN HERE TO SEE HOW MACREBUR RECYCLES
PLASTIC FOR ROADS



BETWEEN A ROCK AND A HARD HAT

MISTAKES ARE OFTEN MADE WHEN CHOOSING SAFETY HELMETS AND THEIR ATTACHMENTS. SHEQ MANAGEMENT TAKES A LOOK AT WHAT TO CONSIDER WHEN PURCHASING SAFETY HELMETS FOR SPECIFIC APPLICATIONS



It is estimated that 89 000 cases of traumatic brain injury (TBI) are reported in South Africa each year. While the majority of TBIs are a result of vehicle accidents and interpersonal violence, about 25 percent can be attributed to falls. International statistics suggest that ten percent of TBIs are caused by workplace injuries.

Safety helmets or hard hats assist in protecting employees from TBIs, along with a number of other possible injuries. However, with a wide range of different models from which to choose, employers are often left unsure as to which hard hats are most suited to their particular industry.

CHECK LIST FOR PICKING A HARD HAT

Taryn Pillay, laboratory quality controller for North Safety Products (NSP) Africa, explains that it is important to undertake a risk assessment to determine the correct type of hard hat required. The ideal material used for the safety helmet in a particular application may differ.

Hard hats made from polycarbonate-based materials, for example, can resist heat of up to 140°C, polypropylene resists heat of up to 160°C and acrylonitrile butadiene styrene (ABS) can resist heat of about 105°C.

The safety helmet should comply with a standard to ensure the user gets the maximum protection. Pillay notes that NSP products comply with the South African National Standards (SANS) 1397:2003.

"Depending on the type of environment in which the helmet is being used, the colour of the hard hat should be considered to ensure visibility. Also, ensure that the choice of helmet includes slots for attaching accessories if and when required. Helmets with an ultraviolet (UV) inhibitor should be considered as this ultimately

extends the lifespan of the helmet when used outdoors," she adds.

TAKING CARE OF SAFETY HELMETS

A common mistake companies make when purchasing safety helmets is to assume that the date marked on the hard hat is an expiry date.

"It is in fact the date of manufacture. There is no fixed expiry date for hard hats, but, like any other product, they come with instructions and recommendations, which need to be adhered to in order to ensure the maximum lifespan of the product," Pillay says.

“ Hard hats should comply with SANS criteria, be inspected frequently and replaced every few years, or when they are compromised.

Hard hats may deteriorate over time, due to UV rays when worn outdoors, as well as from sweat, liquids and other substances.

"As a general guideline, manufacturers of hard hats suggest replacing them every two to three years from the date of issue to the user. Regular inspections are vital if a helmet is exposed to higher temperatures, extreme sunlight, harsh chemicals or other adverse conditions. Helmets should be replaced immediately if there are any signs of damage," Pillay continues.




A standard safety helmet can come with a variety of attachments such as a chin strap or visor. The necessary attachments will depend on the application. Pillay notes, however, that there are a few essential accessories, which include face shields, earmuffs, lamp brackets, cable clips and chin straps.

"Helmets should never be adapted in any way in order to fit attachments, as this could hinder the level of protection offered. Only recommended accessories should be used," she adds.

Some safety helmets have a wider rim that offers additional protection, particularly against the elements. There are also helmets that feature vents to provide continuous airflow, which makes them ideal for employees working in warmer conditions.

NSP plans to introduce another hard hat to the wide variety it already has available. Pillay elaborates: "NSP is in the process of launching a new helmet with an innovative design – the SH1520."

It is important to assess the working environment prior to purchasing safety helmets to ensure the correct hard hats are chosen. As with most personal protective equipment, hard hats should comply with SANS criteria, be inspected frequently and replaced every few years, or when they are compromised.

Equipping employees with the correct hard hats will go a long way to ensuring that they are well protected while at the workplace. 

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COMING UP IN ISSUE 4

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Construction is one of the most physically taxing occupations one can undertake. SHEQ MANAGEMENT explores the topic of ergonomics in construction.

SOFTWARE AS A RISK MANAGEMENT TOOL

When an accident happens, it is of utmost importance to begin an investigation immediately. We look into the art of accident reconstruction.



ENVIRONMENTAL FOCUS

Electric vehicles are slowly but surely gaining prominence – in fact, one electric-vehicle manufacturer is aiming to increase its sales by a whopping 40 percent in the next year. SHEQ MANAGEMENT explores the current state of the “green” motoring industry.

INSURANCE

It is always better to be covered by insurance when an accident occurs. SHEQ MANAGEMENT looks at the benefits of insurance and the options available.

BRAINWAVE

Experts from the SHEQ industry share their knowledge for the benefit of the profession.



PERSONAL PROTECTIVE EQUIPMENT (PPE)

Hand injuries are among the most common in the workplace. We find out what factors should be considered in creating a hand-safety programme.

QUALITY

Virtual reality can help improve the quality – among many other things – of products and processes. We find out how.



IN THE WORKPLACE – WORK ENVIRONMENT

How does your workplace “smell”? Does the stench of discomfort and unhappiness hang in the air or does it smell like the sweet nectar of engagement and productivity?

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