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### SHOWA MAKES A DIFFERENCE:

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#### Road safety

Need to change an  
unsafe mindset

#### Climate unity

Differing views at UN  
Climate Change Conference

#### Workplace well-being

Are OHS concepts  
marketable?

#### A+A: biggest and best

PPE dominates

#### Cyber theft

Criminals target SA's  
weaknesses

#### Global warming

Will plastic waste be  
an unexpected hero?

# uvex

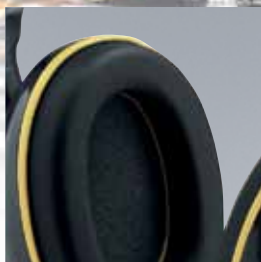
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# ZIMBABWE: BEARING THE BRUNT OF CLIMATE CHANGE

**A**gainst the backdrop of disagreement on climate change action, which followed the United Nations [UN] COP 25 conference held in Madrid, Spain, in December – for SHEQ MANAGEMENT'S report, see page 30 of this edition – it's interesting to note that Zimbabwe, once regarded as the breadbasket of Africa, is said to be facing extreme hunger as a result of prolonged drought aggravated by an economic crisis.

That's the assessment by the UN World Food Programme [WFP], which has recently called on countries around the world to step up support for Zimbabwe where, it says, studies have shown that eight million people – about half of the population – are not getting enough to eat.

According to the WFP's report, the country's 2018/19 cropping season was marred by one of the worst droughts in recent history and dry spells continue to threaten the upcoming 2020 harvest.

The organisation plans to double the number of Zimbabweans that it assists, up to 4.1-million people, but it says it will require over US\$ 200 million [about R3 billion] to meet needs in the first half of 2020 alone.

"As things stand, we will run out of food by end of February, coinciding with the peak of the hunger season – when needs are at their highest," says Niels Balzer, the WFP's deputy country director in Zimbabwe. He says firm pledges from donors are urgently needed as it can take up to three months for funding commitments to become food on people's tables.

According to Balzer, Zimbabwe has been hit hard by three consecutive years of drought. As a result, the maize harvest dropped by 50 percent in 2019 compared with 2018. To meet increasing needs, the WFP was forced to launch an emergency lean-season assistance campaign in August, months earlier than expected, he says.

Hilal Elver, the UN Special Rapporteur on the right to food, visited Zimbabwe in November where she said she witnessed how women and children were bearing the brunt of the crisis. "In a desperate effort to find alternative means of livelihood, some have resorted to coping mechanisms that violate their most fundamental human rights and freedoms. As a result, school drop-outs, early marriage, domestic violence,

prostitution and sexual exploitation are on the rise throughout Zimbabwe," she said in a statement following her 11-day mission.

The hunger crisis comes as Zimbabwe faces its worst economic downturn in a decade. Runaway inflation is just one of the symptoms, and it has put the price of basic goods beyond the reach of the average citizen. The WFP reports that bread is now 20 times more expensive than it was six months ago.

Increasing hardship is forcing families to skip meals, take children out of school, or sell off livestock – among other desperate measures implemented by the population to ward off the effects of the drought.

According to a report by Matteo Cosorich, a WFP official, Gladys Chikukwa – who sells tomatoes at the second largest market in the country, Sukubva – is finding it hard to survive. "Just because we are selling tomatoes in this market doesn't mean that we have enough food for ourselves. We are seriously struggling. Our produce is rotting because of prices. Today, tomatoes will sell for 250 Zimbabwe dollars, tomorrow 300 dollars, the next day 400 dollars – and people don't have that money," he quotes her as saying.

The drought shows no signs of letting up, and forecasts indicate another poor harvest in April, according to the WFP. The UN agency also faces challenges in scaling-up its operations in Zimbabwe as the shortage of local currency – coupled with rapid inflation – requires switching from cash-based assistance to food distribution.

And, with other southern African countries also gripped by drought, food stocks must be sourced outside the continent and then shipped to neighbouring South Africa or Mozambique before being transported to landlocked Zimbabwe.

The WFP estimates that it will require nearly 200 000 t of food to assist the number of Zimbabweans it plans to target, with Balzer underlining why financial support from the international community is so desperately needed.

"While the WFP now has the staff, partners, trucking and logistics capacity in place for a major surge in Zimbabwe, it is essential that we receive the funding to be able to fully deliver," he said. "The lives of so many depend on this."

**WYNTER MURDOCH**



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**SHEQ Management**

Julie Higgs shared some startling revelations about air quality at the 2019 Saatchi Health and Safety Conference – one of which was that the degradation of indoor air quality is one of the top five health hazards globally. <http://bit.ly/2P5uF6H>



**SHEQ Management**

Given the regularity of forklift injuries and fatalities, forklift safety awareness plays a significant role in reducing accidents. <http://bit.ly/2Y1UJCF>



**SHEQ Management**

A British steel company has been fined £1.8 million (£34 million) following the death of two engineers in an explosion. Here's what happened. <http://bit.ly/2Y1uVnT>



**SHEQ Management**

Micro-learning can help employees to remember or brush up on important workplace safety information. It's the ideal supplement to formal training. <http://bit.ly/2P5uF6H>



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Reduce accidents at work during machine interventions with Bailey's Lockout/Tagout solutions. Here's what you need to know. <http://bit.ly/2Y1UJCF>



**SHEQ Management**

Saatchi CEO Neel Patel explains why it is important to pursue continuing professional development in the health and safety field. <http://bit.ly/2Y1uVnT>



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Platooning. It's a big word in the transport industry. Observers believe it will change the way the world's road freight systems operate. This is what the industry is up to... <http://bit.ly/2Y1UJCF>



**SHEQ Management**

While food waste is one of the biggest contributors to the global carbon footprint, the problem can be addressed through better food transportation. <http://bit.ly/2P5uF6H>



**SHEQ Management**

Cacao pulp, formerly regarded as waste, has been used successfully as a substitute for sugar in a new Nesbitt McKel, which is available in Japan. <http://bit.ly/2Y1uVnT>



**SHEQ Management**

The Center for Disease Control in the United States suspects that liquid vitamin E acetate, which is found in electronic cigarettes, is the culprit behind hundreds of vapors in America falling ill with lung disease. <http://bit.ly/2P5uF6H>



**SHEQ Management**

Trust, with risk management at the core, has become a priority for companies. Here are some factors to consider in ensuring a trustworthy business with minimal risk. <http://bit.ly/2Y1UJCF>



**SHEQ Management**

Global petroleum company BP has signed an agreement to buy diesel manufactured from plastic. Here's how the process works. <http://bit.ly/2Y1uVnT>



**SHEQ Management**

Identifying and addressing substance abuse in the workplace is essential to ensuring employee safety. This expert advice can assist companies in getting started. <http://bit.ly/2P5uF6H>



**SHEQ Management**

Not sure what to expect in the New Year? Nicole Chaudet lists some of the health and safety trends for 2020, including how safety officers will be wearing even more hats. <http://bit.ly/2Y1uVnT>



**SHEQ Management**

StrongArm Technologies has designed a device to monitor employee movement in a warehouse, which automatically warns individuals of potentially dangerous behaviour. <http://bit.ly/2Y1uVnT>





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## BUSINESS INTERRUPTION AFRICA'S TOP PERIL

According to the latest edition of the Allianz Risk Barometer, business interruption (BI) tops the list of risks in Africa and the Middle East. The report – released last month – says causes of BI are becoming more diverse, ranging from critical infrastructure blackouts, fires, explosions or natural catastrophes, to disruption of digital supply chains or even political violence.

Cyber incidents moved from the third top risk in the region in last year's Barometer to second this year. According to the assessment, awareness of cyber threats has grown rapidly, driven by business's increasing reliance on data and IT systems, as well as a number of high-profile incidents.

The annual survey incorporates the views of 2 718 experts in over 100 countries, including CEOs, risk managers, brokers and insurance experts. "Businesses across Africa and the Middle East are increasingly concerned about BI. It ranks in the top three risks in Tanzania, Nigeria, South Africa and Cameroon," says Thusang Mahlangu, Allianz Africa's CEO.

He adds that cyber theft is seen as the next highest regional risk, while leaders of companies are also more worried about changes in legislation and regulation, which rises to third place on the list.

Marek Stanislawski, deputy head of cyber at Allianz, says

African-based businesses face the challenge of larger and more expensive data breaches this year, an increase in ransomware and spoofing incidents, as well as the prospect of privacy-driven fines or litigation after an event.

"Incidents are becoming more damaging, increasingly targeting large companies with sophisticated attacks and hefty extortion demands. Five years ago, a typical ransomware demand would have amounted to tens of thousands of dollars. Now it can be in the millions," he says.

Equally, businesses are also increasingly exposed to the direct or indirect impact of riots, civil unrest or terrorism attacks. Last year saw unrest in many parts of Africa – including South Africa – resulting in property damage, BI and general loss of income for both local and multinational companies.

"The top risks in South Africa match the top three global risks, which shows that Africa's businesses have concerns similar to other companies around the world," Mahlangu says.

According to the report, changes in legislation and regulation, [which placed third on the list] and climate change [a new entry in 10th place] underline fears regarding the United States-China trade war, Brexit, the African Continental Free Trade Area (AfCFTA) and global warming as being of increasing concern for companies in the region.



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## LOOKING AHEAD TO 2020 VISION

Three shows under one roof – that was the positive experience of over 10 000 visitors to Gallagher Convention Centre in May last year. They were there to experience the co-located trade shows that spanned three different, yet related, working areas – Securex South Africa, the continent's biggest security and fire trade show; A-OSH Expo, Africa's leading occupational health and safety (OHS) exhibition; and a newly revamped Facilities Management Expo.

Now, says Sven Smit, event director at Specialised Exhibitions, a part of the Montgomery Group, the combined event this year promises to provide even more across this triple offering under the banner, 2020 Vision.

"Securex South Africa, now in its 27th year, showcases a highly respected security offering in terms of both physical security issues around the guarding of premises and people, as well as a strong cybersecurity element," explains Smit.

"We are also thrilled to be celebrating A-OSH Expo's first complete decade during June 2020. Since the show's inception, we have seen a keen and growing awareness of the importance of health and safety issues in the workplace."

Smit notes: "This is the second year we have been involved in hosting the Facilities Management Expo. We are very pleased to be able to once again co-locate this show with the other two, and thereby allow visitors to experience the content offered via the seminar theatres and the products and solutions offered by the exhibitors."

Smit adds: "As an exhibitor, the expo is an incredibly effective way to engage face-to-face with your target market and your potential audience, while as a visitor it is an excellent opportunity to compare different sector options, educate yourself quickly and efficiently on the latest trends, and engage with industry experts and your peers."

This year's event is expected to feature more than 300 exhibitors and bring approximately 10 000 visitors through the doors across all three show days, including around 300 international visitors from 20 countries. African countries represented have historically included Botswana, Zimbabwe, Mozambique, Mauritius and Namibia.

"We are truly excited about our 2020 Vision across all three shows next year," concludes Smit.



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## PLASTICS ASSOCIATION REACTS TO SOUTH AFRICA'S WATER WOES

South Africa's deepening water crisis appears to be firmly on President Cyril Ramaphosa's mind. Recently, in an open letter published in the media, he painted a grim picture of the country's threatening water woes.

"Our existing water systems are already over-exploited as usage increases rapidly due to population growth and as more homes get connected to water. Combine this with the worsening effects of climate change and we are clearly facing a dire situation.

"Unless we take drastic measures to conserve water sources and promote efficient use, water insecurity will become the biggest developmental and economic challenge facing this country. Our current energy challenges will seem small by comparison. Unless we act now, we may not have water anywhere," he said.

Human Settlements, Water and Sanitation Minister Lindiwe Sisulu announced a few days later that South Africa intended to spend R900 billion over the next decade to improve its water-supply and storage infrastructure and tackle a growing shortage of the resource.

She also announced that a separate unit would be established to finance, manage and operate the national water infrastructure, while projects that were currently in the works would be expedited.

Commenting on the latest developments, the Southern African Plastic Pipe Manufacturers Association [SAPPMA] said it was relieved that the government had recognised the seriousness of the problem and was making resources available. However, in a statement the association pointed out that the impact of the water woes could have been reduced – if not completely avoided.

SAPPMA's CEO, Jan Venter said that while drought and climate change might have aggravated the problem, a major cause was the country's failure to upgrade and maintain its water pipes and infrastructure over the past decade.

"Much of the country's water infrastructure consists of old steel and asbestos-cement water pipes that were installed in the early

1960s or earlier. These pipes have a limited lifespan of no more than 50 years before they start to corrode, spring leaks and need to be replaced," he said.

According to Venter, in South Africa and the rest of the world, plastic pipes are the material of choice to replace ageing pipes and infrastructure as they do not corrode or perish, and the joints are leak proof if installed correctly.



"They are available in various diameters and wall thicknesses, offer a much longer lifespan, are cheaper and more efficient to install and offer significant savings to municipalities, thanks to their offering less friction, which results in lower pumping costs, less maintenance and fewer interruptions," he said.

"Our members' dwindling sales figures over the last few years show that no orders were being placed for new pipes, despite the fact that municipal budgets were allocated for upgrades and maintenance."

However, he said by far the biggest water wastage occurred in municipalities that did not repair leaks, or failed to maintain water pipelines. "The Water Research Council recently conducted a survey of 132 municipalities in South Africa, which revealed that close to 40 percent of the country's potable water was being lost as a result of leaks, incorrect metering and unauthorised consumption. By comparison, Australia [also classified as a water-scarce country] loses less than 10 percent per year," he said.

"The two main causes of water loss are corrosion and the poor joining of pipes. Not only does South Africa suffer financial losses of more than R7,2 billion a year, but we have lost a significant supply of water that we might never be able to replace.

"Despite the good rains that have fallen recently in large parts of our country, we can still run out of water if we do not protect and look after what we have. Government must realise the seriousness of the situation and plan for the generations to come," he concluded.

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## GYPROC GERMISTON AWARDED ISO CERTIFICATION

Gyproc Germiston is the first Saint-Gobain plant in sub-Saharan Africa to receive certification for its health and safety management systems in terms of the new international standard ISO 45001:2018.

In a statement, a company spokesman says internationally accepted safety standards are paramount to Saint-Gobain, where ongoing excellence is underpinned by international safety management systems. "In March 2018, a new ISO standard – ISO 45001:2018 – was introduced, replacing the previously used British standard, OHSAS 18001:200. From that date, companies were given three years to move from the old standard to the new one."

According to the statement, the new standard follows a similar structure to that of the old one, but differs from it in three important ways. "First, occupational health and safety [OHS] management is about more than regulations and governance. It has to be seen in the context of the company's culture and the impact it has on all stakeholders, including workers and customers.

"Second, the company has to identify all parties with an interest in the OHS management system, such as workers, consumers and regulators, and identify their needs and expectations. Third, it must have a process in place to

involve workers and trade unions in the development, implementation and continuous improvement of the OHS management system."

According to Deon Potgieter, Gyproc Isover National SHEAR Manager, Saint-Gobain's approach is inclusive and is far removed from the days where top management set goals and objectives for the OHS management system.

"The new ISO45001:2018 standard requires workers to participate in and be consulted to establish the OHS policy; define OHS objectives and plan how to achieve them; establish, implement and maintain an audit programme and ensure continuous improvement; identify hazards and assess risks and opportunities; investigate incidents and nonconformities, and determine corrective actions," he says.

According to Jacques Mans, a safety engineer at the plant, worker participation and consultation played a major role in Gyproc Germiston's transition to the new international standard. "While initially it was a challenge, one of the greatest advantages of involving our workers is the sense of purpose and ownership it has created, and we now have a workforce that is more aware of and committed to health and safety management," he says.

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### **MAKING A DIFFERENCE TO THE ENVIRONMENT**

As a response to the overwhelming amount of plastic waste and the growing climate crisis, SHOWA is investing heavily into Research & Development (R&D) for products with a reduced impact on the environment. An estimated 100 billion pairs of gloves are thrown away each year. Laid out end-to-end, that's enough to stretch to the moon and back 30 times. Considering that these gloves take more than 100 years to biodegrade in a landfill, the amount of glove waste in landfills is expected to increase vastly with our growing population.

In 2012, SHOWA launched its revolutionary Eco Best Technology® (EBT) and introduced the first biodegradable disposable nitrile glove in the market. Now, SHOWA expanded the amount of EBT gloves, offering the biggest biodegradable glove range in the market.

### **INNOVATION, PROTECTION AND PRESERVATION IN ONE**

EBT offers the solution that makes a difference to the environment, without any compromise on protection and performance for the user. Thanks to its special composition, EBT gloves decompose within 1 to 5 years in active landfills, as proven by ASTM D5511 & D5526 tests, while non-EBT products take more than 100 years to do so. That means the EBT gloves decompose at least 20 times faster than regular nitrile gloves.

*"Initially, we launched the first biodegradable single use glove as a way to reduce the impact that these gloves have on the environment. We foresaw the need then, and encouraged our business partners to make more environmentally conscious decisions when purchasing hand protection,"* explains Product Manager EMEA and single use gloves specialist, Gabriel Szelenyi.



Since then, the world has seen a massive increase in demand for products that are more sustainable or have a reduced impact on the environment, and not only for consumer products. Frost & Sullivan's latest report on the European industrial hand protection market forecasts a "rising demand for Eco-friendly Gloves".

R&D Manager and discoverer of EBT, Brian Mosely, further explains: *"The Frost and Sullivan report highlights our EBT biodegradable nitrile gloves, but our commitment to sustainability remains a key component of our research and development strategy. We will expand the EBT technology across all suitable polymers within our expansive product portfolio. This way we can meet the demands of today, without compromising for tomorrow."*

## SHOWA'S EBT: SAME GLOVE, BETTER FOR THE PLANET

Founded in 1954, SHOWA takes pride in developing high quality medical, cut resistant, general purpose, chemical resistant and specialty hand protection. Every SHOWA EBT glove is made with the same rigid quality controls and standards as its entire portfolio. That means the overall performance of the glove - its durability, comfort, grip and protection - stays exactly the same.

SHOWA offers the most extensive selection of biodegradable hand protection on the market, with the following seven EBT nitrile gloves, covering a wide range of applications, including food contact, and providing a more sustainable alternative for users:



**SHOWA  
731**

Created with premium-grade plasticizers and nitrile reinforcement, SHOWA 731 brings you the pinnacle of tactile precision and high-capacity protection against solvents and acids. This glove is ideal for working in wet, greasy and oily environments.



**SHOWA  
707HVO**

This glove blends the best of disposable and chemical resistant technology to deliver optimum fit, feel and comfort while protecting against liquids, chemicals, oils, hydrocarbons, grease, and abrasions.



**SHOWA  
NSK 24**

Providing excellent protection from a wide array of solvents, oils and acids, the SHOWA NSK24 is a super flexible, watertight, knit-lined nitrile glove. Previously made from regular nitrile, but now with EBT, it offers high chemical and abrasion resistance with rough grip.



**SHOWA  
6110PF**

This green biodegradable 0,10mm single use nitrile glove delivers unmatched comfort, dexterity and performance across a range of applications. The SHOWA 6110PF protects against abrasive solvents while avoiding type I and IV latex allergies.



**SHOWA  
6112PF**

This black biodegradable 0,10mm single use nitrile glove fits like a second skin, for lasting comfort and dexterity while performing delicate tasks. The SHOWA 6112PF is proven to protect against narcotics laced with Fentanyl and abrasive liquids.



**SHOWA  
7500PF**

The competitively priced SHOWA 7500PF was designed for TSA, immigration, and all applications that require hourly changes in hand protection, thus creating the most waste. Offered in food-safe blue, it also leaves no silicone contamination or finger prints behind.



**SHOWA  
7502PF**

With its accelerator-free formulation, this 0,06mm single use glove protects even the very sensitive skin. It is extremely lightweight, yet effectively protects against accelerators, chemicals and dermatitis.

## FEEL THE DIFFERENCE WITH SHOWA

In a recent campaign, SHOWA invites its customer, end users and distribution partners to find the EBT alternative of their favourite nitrile glove, and to "feel the difference" between the two, knowing that there is no difference to be "felt". The only difference between the gloves will be the impact it has on the environment.

**You can join SHOWA in this endeavour at the A-OSH show in Johannesburg - Hall 3, Stand D19.**

Alternatively, by requesting a free sample trial on SHOWA's website at [www.SHOWAgroup.com](http://www.SHOWAgroup.com).

**Discover our  
Eco Best Technology®  
and products:**

Scan the QR-code below with  
your smartphone camera or  
go to [SHOWAgroup.com](http://SHOWAgroup.com)



**SHOWA**  
Always Innovating. Never Imitating.

# THE UNSAFE “IN-GROUP” ON OUR ROADS

**The more people break the rules of the road, the more tolerant others become of at-risk behaviour, and in time they, too, start to break the rules. To combat the scourge, company leaders should make a concerted effort to raise awareness of road safety, says BRIAN DARLINGTON**

In 2017 I wrote an article titled: Not having to flip that switch, after spending two hours driving on the N2 highway between King Shaka Airport and Richards Bay. The article focused on the challenges involved in bridging the safety mindset gap between home and work.

Fast forward to 2019. At the end of the year, during one of my trips in South Africa, I was horrified to see so many drivers ignoring the rules of the road – many more than I had observed in previous years.

Once again, the number and severity of at-risk behaviours observed during the trip was staggering and rather concerning. These included:

- Drivers failing to stop at red traffic lights appeared to have become the norm. It is unbelievable that stopping at a red traffic light seems to have become an option these days. I was terrified each time I approached a green traffic light, and as a result I slowed down to ensure I didn't collide with other drivers who were skipping red lights from my left and right.
- Speed limits seemed to mean very little as there were countless vehicles travelling at high speed, both on the N2 highway as well as the roads within Richards Bay. There were roadworks on the N2, which required drivers to slow down to 40 km/h. However, drivers of vehicles behind me were clearly frustrated as I kept to the designated speed. One driver in a bakkie flashed his vehicle's lights constantly, indicating that I needed to speed up.

- Solid yellow lines, which are designed as emergency lanes, have been turned into regular traffic lanes along the N2. Vehicles approaching from behind expect drivers ahead to move into the emergency lane to allow an overtaking manoeuvre. One morning I was overtaking a vehicle that was driving in the emergency lane when, to my horror, a bus overtook me crossing a painted island on the road dedicated for vehicles intending to turn to the right.

Incidents such as these do not occur only during daylight hours when obstacles ahead – such as vehicles, pedestrians and even cattle in some instances – can be seen fairly easily. When driving at night, it is almost impossible to see far enough ahead to determine whether obstacles are present.

Other issues identified during the week were the number of passengers I saw sitting or standing in the load bins of trucks and bakkies with no safety-belt protection; the number of people talking or texting on their mobile phones while driving; and, the one that irritated me most was the number of children, including toddlers, who were standing or sitting on their parents' laps in the passenger seats of vehicles.

During the trip, I spent two days in Pretoria and was shocked to observe minibus taxis on the wrong side of the road in peak-hour traffic, forcing oncoming vehicles to move out of the way to avoid collisions.

The more people break the rules of the road, the more





tolerant others become of these types of at-risk behaviours and, in time they, too, start to break the rules. Using this analogy for safety beyond just the road, what's needed is a 24-hour safety mindset.

Whether we are driving recklessly, talking on our mobile phones or texting while driving, the transgressions contribute to an unsafe mindset and development of unsafe behaviour.

To be honest, I am not sure what can be done to change the attitude of South African drivers, since so many seem to continuously break the rules of the road. It is concerning that traffic police seem to ignore the law-breakers and, at times, even breach the rules themselves.


However, leaders of companies should make a concerted effort to raise awareness of road safety among employees and contractors. It might not make a huge difference on the roads; however, every safe driver counts and makes a small difference. As I have often mentioned, we need to work on safe behaviour becoming a habit both on the conscious and unconscious levels.

If we develop safe habits in our workplace, they will eventually contribute to safe practices when our employees and contractors are on the roads and during their private lives.

Safety is about caring for others – not only at work, but in public life as well.

Sadly, my experience confirmed how few drivers are sufficiently risk averse. People just do not seem to take their safety, or the safety of others, into account when it comes to driving – an attitude and approach that contributes significantly to the approximately 14 000 people being killed on South Africa's roads each year. That number equates to 38 deaths on the roads each day – and our actions could make the difference in reducing the toll.

Many mornings I have a call with a friend in South Africa and we have a standing joke that I will receive what we call "the traffic report," when comments are made on someone's at-risk behaviour on the road, or the occurrence of yet another vehicle incident. It is tragic that during virtually every call, there is a reason for our "traffic report".

One morning, while travelling from the hotel to the site, I noticed a large hippo grazing on the side of the road. This reminded me of what a lovely country South Africa is and how privileged we are with regard to the wildlife around us. Let us all respect and appreciate what we have – and that includes other users of the roads. 



**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. Darlington 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, he 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.

# SELLING SAFETY

Can ideas that work well in the world of sales be applied to improving health and safety performance in the workplace? **ANDREW SHARMAN** and **DARREN SUTTON** outline some concepts

**T**he frenzy which surrounded recent Black Friday sales across the world got us thinking: what if we sold safety in the same way? What could we learn from some of the very best marketing campaigns to influence people to take better care of themselves and others, every moment of every day?

Well, that's exactly what we try to encourage our delegates to do on our IOSH Certificated Behavioural Safety Leadership programmes all around the world. Let's take a look at what works well in the world of sales, and see how we can apply these ideas to improving health and safety performance in the workplace.

## SELL SAFETY IN THE SAME WAY AS YOUR COMPANY SELLS ITS BEST PRODUCT

This is a great place to start. Look at the effort and commitment that your organisation puts into selling your product or services. There is likely to be a very detailed and scheduled system of targeting exactly the right customer for exactly the right product.

We will find innovative and exciting ways to grab their attention (and keep it) to ensure that they will see and read our sales campaigns. We will ensure that we follow up on our message to make sure that they are aware of what we are offering and explain to them all the ways that they might be able to purchase our products.

Your company will probably use the most creative and persuasive people to help design these campaigns – some companies even employ or engage psychologists, anthropologists and skilled data analysts to make absolutely

sure that the right message gets to the right customer at just the right time!

Just imagine if we put the same effort into creating safety excellence and influencing critical behaviours in our workplaces. What if we were to employ the same behavioural insights and approaches that we might use in our corporate showrooms and sales outlets in our manufacturing plants, mines and warehouses?

## MAKE IT SPECIFIC

When committing to a sales campaign, experienced sales people will rarely try to sell a company's entire product inventory. They know that's a tough call! They focus precisely on specific products that they really want to sell – usually either a shiny new thing or perhaps old stock that's always been difficult to shift. They'll be inventive in finding unique ways of selling these products.

It's the same for safety! If we try to sell safety to the masses as a generic, overarching concept, then that's always going to be tough. So, let's learn from sales and marketing experts and choose the critical behaviours on which we most want to concentrate. They could be related to new processes or pieces of equipment or they might involve old behaviour concepts to which people just won't commit, for example, wearing gloves, asking for help or holding the handrail. What if we really focused our energy and creative minds to influence these specific behaviours and create new habits? You'll be amazed at how things spread.

As you're starting to consider ways to sell your message, take care to keep your feet on the ground and your head in



the right place. You know there's a fine line between being an expert and highly effective sales executive, and coming across like the person who tries to sell a beat-up old car by pretending that it's fantastic.

As you work out how to present workplace safety in a more attractive light, let's pause for a moment to consider a couple of potential traps.

#### **INCENTIVISATION OR BRIBERY AND CORRUPTION?**

Let's be very careful here – incentivising or rewarding any kind of performance is an extrinsic motivator and usually leads to all kinds of unwanted outcomes, even when applied to sales.

It can be very effective in influencing behaviour, but it's usually only effective in the short term, as people strive to get the prize in return for the behaviour – and then they want even better deals in the future!

In safety, if we try to incentivise performance by setting specific targets, the unintended consequences can be catastrophic. The perils of offering rewards and extrinsic motivation are too lengthy to include in this article.

If you're curious to find out more about this phenomenon, there's a whole section of our IOSH Certificate in Behavioural Safety Leadership programme devoted to this very subject.

products could be very different to yours!

In safety, it is easy to highlight the bad things – such as injuries, illness or even disciplinary action – to influence behaviour, but rarely does the threat of something bad encourage someone to do something good.

The threat of punishment may have worked when we were teaching our kids manners, but grown adults rarely respond well. Instead of threatening worst-case scenarios, stay focused on the positive value that great workplace safety can bring. Sell the benefits, not the negatives.

Okay, now that we've looked at a couple of potential pitfalls, let's get back on track and consider some more positive ways to encourage workers to think about workplace safety.

#### **MAKE IT PERSONAL**

A great marketing campaign will make things as personal and as localised as possible. Even if it's just an email campaign that starts with "Dear Deon" – or whatever the actual name is – and then continues to mention your name throughout the campaign. This kind of detail can really make a significant difference to the customer, since personalised campaigns make us feel special and help us to believe that we are really important.



#### **DIMINISHING THE OPPOSITION?**

Some organisations try to let their customers know how awful their competitors' products might be and how bad things will happen if they purchase these products or services. This is a high-risk strategy and is rarely employed by successful marketing campaigns. You risk highlighting that customers have alternatives, and their perceptions of your competitors'

Starbucks is a great example of this, as it writes the name of its customers on the sides of its coffee cups. Coca-Cola picked up on the concept recently in its packaging design, which featured different names of people – essentially encouraging customers to find – and then buy – a bottle or can with their name on it. And, in TV and radio advertisements, we'll notice slight nuances in different countries or regions to



take account of language, local culture and even accents and dialects.

It's about targeting the right product to the right audience at just the right time. It's highly unlikely that you will see a marketing campaign for hot soup in the middle of a heatwave – or braai equipment in the middle of winter!

What if we did the same for safety? We often hear tales of how “toolbox talks just aren't relevant to us” or “they always do the safety walks and audits when it's not so busy” and “when they do safety conversations, they don't even ask my name or know what I do”.

An advertising campaign would be a huge failure if it was approached in similar fashion – so why do we use this technique for safety? How can you tailor your approach to your audience and make it feel personal?

### TELL A STORY

Stories are powerful. People remember the stories and fables they were told during their childhood. A good story usually has an underlying message or metaphor attached – and a great sales campaign will hook onto this. The characters will be entertaining and easy to relate to, the story will probably stir feelings and emotions, too.

A story will help people become attached to the product or service that we are trying to sell. There was a particularly successful advertising campaign for a brand of coffee back in the 1980s, which started with a guy asking his neighbour for some sugar for his coffee.

The relationship between the two neighbours developed over a period of several months and people were actually looking forward to seeing the next “episode” – which was just a 90-second TV advertisement. The coffee became synonymous with the story and sales picked up significantly.

What if we employed similar campaigns to motivate changes in critical behaviour in our workplaces? What if we created interesting characters with humour and a developing dialogue that kept people interested and stirred their feelings and emotions occasionally, too?

### MAKE IT EASY TO BUY... AND HARD TO SAY NO

Finally, have you ever noticed how companies like Netflix,

Amazon, Apple and even our local supermarket chains, make things so easy for us to buy or sign up to. It's just “click here” or “sign there” and they've even found ways to automatically fill in some of our details for us.

Those items in the supermarket that they really want us to buy will be placed right at the checkout within easy reach so we don't forget to put them in our baskets or trolleys.

Now, if you try to cancel any of those services or return those goods to the supermarket, you'll find it isn't quite as easy to do. The “cancel” page on the website will typically be hidden away somewhere with no prominently featured links – and the returns department will be right at the back of the store, or even in a different location altogether!


Influencing human behaviour is sometimes as simple as making the things that we want people to do as easy as possible – and the things we don't want them to do as difficult as we can.

In safety, particularly for those critical behaviours we hear about, it's often the other way around. Unsafe behaviour – for example, taking a shortcut instead of using a pedestrian walkway – is actually far easier to execute than safe or compliant behaviour.

### AND SO, TO CLOSE...

We can learn a lot from our sales and marketing people, who get creative and use innovative methods to really persuade people to buy stuff. Some of our very best ideas on our safety leadership and behavioural safety courses around the world come from people who have worked in sales teams and marketing departments.

Sometimes it's about thinking differently and trying something new. Sometimes it's just about making the safe behaviour easier to do. Always, it's about how much we actually care and how much attention and focus we allocate to solve this problem. We can be sure that our most creative people will pay as much attention as is required to develop a marketing campaign that works over a sustainable period.

Perhaps, after reading this article, an immediate action for you might be to grab a coffee with a colleague from the sales or marketing department and ask how he or she would sell safety! 



Professor **Andrew Sharman** (left) is chief executive and **Darren Sutton** is senior partner at RMS, consultants on leadership and cultural excellence to a wide range of blue-chip corporates and non-government organisations globally. Find out more at [www.RMSswitzerland.com](http://www.RMSswitzerland.com). RMS's IOSH-approved and certified Behavioural Safety Leadership online learning programme takes a mindful approach to developing safety leadership and provides a low-cost, practical and easy-access route to building a robust safety culture in an organisation. E-mail us at: [team@RMSswitzerland.com](mailto:team@RMSswitzerland.com) and mention this article to find out more and receive a free gift and special offer when you begin your online programme.

**SHEQ MANAGEMENT** readers can purchase Sharman's best-selling safety culture book **From Accidents to Zero** with a **20-percent** discount.

Go to: [www.fromaccidentstozero.com](http://www.fromaccidentstozero.com) and enter the code **SHEQSA20**.






# OUTLINING SAIOSH'S CODE OF CONDUCT

**Professionals often face ethical dilemmas while carrying out their duties. Saioish is governed by a constitution, a code of conduct and by disciplinary procedures**

**T**he Saioish Code of Conduct specifies conditions with which members must comply when carrying out their professional activities. Among these are that members of the Institute shall:

- Owe a primary loyalty to the workforce, the community they serve and the environment they affect.
- Perform according to the highest standards and ethical principles while maintaining respect for human dignity.
- Seek to ensure professional independence in the execution of their functions.
- Abide by the legal requirements relating to their practice.
- Be honest, objective and reliable when called on to give an opinion in their professional capacity.
- Take all reasonable steps to obtain, maintain and develop their professional competence and encourage others working under their supervision to do so.
- Acknowledge any limitations in their own competence, and not undertake any activities for which they are not appropriately prepared, or, where applicable, qualified.
- Accept professional responsibility for all their work and take all reasonable steps to ensure that persons working under their authority are competent to carry out the tasks assigned to them; are treated with fairness and equal opportunity; and accept responsibility for work done under the authority delegated by them.
- Take reasonable steps to ensure that persons overruling or neglecting their professional advice are formally made aware of potential adverse consequences which may result.
- Have regard to the reputation and good standing of the Institute, other members, and professional practice and standards, and not directly or indirectly bring them into disrepute.
- Provide the Institute with information that is reasonably required by it in order to discipline and regulate the professional conduct of its members.
- Not directly or indirectly, recklessly or maliciously injure, or attempt to injure, the professional reputation, prospects or business of another.
- Not behave in a way which may be considered inappropriate to other members or staff of the Institute.
- Not improperly use their membership or position for commercial or personal gain, or attempt to use qualifications, titles and/or designations to which they are not entitled.
- Seek to avoid their professional judgement being influenced by any conflict of interest and shall inform their employer, client, or the Institution of any conflict between the member's personal interest and service to the relevant party.
- Not improperly disclose any information that may reasonably be considered to be prejudicial to the business of any present or past employer, client or the Institution.
- Ensure that information they hold, which is necessary to safeguard the health and safety of those persons for whom they have a legal and moral responsibility, is made available as required.
- When holding or handling any privileged information relating to living individuals, ensure that they comply with the principles and notification requirements set out in the legislation for the jurisdiction in which they undertake their duties.
- Maintain financial propriety in all their professional dealings with employers and clients. Professional indemnity insurance is optional and at the sole discretion of the individual. No claims whatsoever can be made against Saioish.
- Not unfairly discriminate on the grounds of race, colour, religion or belief, disability, sex, marital status, age, sexual orientation, nationality and ethnic or national origins.
- Act within the law and notify the Institute if they are convicted of any criminal offence. A relevant conviction may lead to disciplinary proceedings against that member.
- Members must comply with the Institution's constitution. Failure to uphold the constitution may result in immediate suspension from membership.

The Saioish Council thanks members for adhering to the Code of Conduct. Documents that contain the full details can be viewed or downloaded by visiting [www.saiosha.co.za](http://www.saiosha.co.za) 



**Sanjay Munnoo** has over 15 years' experience in the risk and financial services industries. He started his career at Alexander Forbes and now works at FEMA as Regional Manager. He held several leadership positions including that of chairman of the board at the Workers Accident and Rehabilitation Centre, and chairman of the KZN MBA Health and Safety Committee. Sanjay is a Chartered Member of Saioish (CMSaioish) and was appointed as president of Saioish in June 2017. He is currently completing a PhD in Construction Management.

# WORKMEN'S COMPENSATION AND VOLUNTEERS

**Are volunteer emergency responders – such as a firefighters – entitled to claim compensation if they are injured on duty? ALBERT MUSHAI and ROBERT VIVIAN examine the question**

**R**ecently, Australia was confronted by widespread forest fires. Dealing with the high number of infernos outstripped the capabilities of full-time manpower and a large number of volunteers quickly rallied to the call. Not surprisingly, the question arose about what would happen if any of them were injured while fighting the flames. Would they receive workmen's compensation?

Since the fires were widespread, many volunteers travelled long distances to lend their services – and hence a further question arose: what would happen if any of them were to sustain injury in a motor accident while in transit to or from a fire site? Definitive answers were not immediately available – but these issues can be discussed in broad outline.

Similar questions and issues arose in South Africa some time ago in a different context – and workmen's compensation legislation was amended to provide answers, at least in part. This article examines some of those developments.

The position in South Africa draws from the recognition that some factories are situated in isolated areas – considerable distances from the nearest municipality where a fire station exists. Even within municipalities, there could be large factories and, if a fire breaks out, it is important to fight the flames immediately, while waiting for the arrival of the fire brigade.

In view of this, many factories established emergency response teams, more often than not comprising employees who were unlikely to be professional firefighters or other professional emergency personnel. In their full-time jobs, they could, for example, be artisans.

A further development arose: if a fire or other emergency broke out at a factory, emergency response teams from other factories would rush to offer assistance. As is the

case in Australia, the question of injuries surfaced and it was deemed necessary to address the issue through legislation. Therefore, the already amended section 28 of the now repealed Workmen's Compensation Act 30 of 1941 was replaced in terms of section 2 of Act 24 of 1981.

The section was titled Accidents during training for – or performance of – emergency services. As is well known, the 1941 Act was repealed and replaced by the Compensation for Injuries and Diseases [COID] Act 130 of 1993. This section reappeared as section 25 of COID and reads as follows:

*If an employee meets with an accident*

- (a) while he is, with the consent of his employer, being trained in organised first aid, ambulance or rescue work, firefighting or any other emergency service;*
- (b) while he is engaged in or about his employer's mine, works or premises in organised first aid, ambulance or rescue work, firefighting or any other emergency service;*
- (c) while he is, with the consent of his employer, engaged in any organised first aid, ambulance or rescue work, firefighting or any other emergency service on any mine works or premises other than his employer's, such accidents shall, for the purposes of this Act, be deemed to have risen out of and in the course of his employment.*

Even in the absence of this section, the injured employee may well have been entitled to compensation if injured. The right to receive compensation is set out in terms of section 22 which reads:

*If an employee meets with an accident resulting in his disablement or death, such employee or the dependants of such employee shall, subject to the provisions of this Act, be*



*entitled to the benefits provided for and prescribed in this Act.*

Therefore, the injured person had to be an employee who meets with an accident. The definition of employee more or less coincides with the usual idea of an employee:

*[a] "employee" means any person who has entered into or works under a contract of service... with an employer, whenever the contract is express or implied or oral or in writing...*

Clearly, a problem could arise if the injured person is only a volunteer. That person may have difficulties meeting the obligation to show he or she is an employee. Thus, an Australian volunteer may have a problem.

On the other hand, if a person is employed as an artisan and a fire breaks out in circumstances where the same employee is part of the team fighting the fire and is injured, he or she remains an employee and meets the requirement of being an employee. This would be true even if fighting a fire at premises not belonging to his or her employer.

A further requirement in terms of the Act is that the employee has to be involved in an accident, which is clarified as: "an accident arising out of and in the course of the employee's employment". Clearly, this raises a number of questions.

It could be argued that a person employed as an artisan is not employed as a firefighter. Consequently, an injury to such a person while fighting a fire is not in the course of employment. He or she has been employed to do the work of

an artisan and not of a firefighter. The position becomes even worse if injury occurs while fighting a blaze at a place other than an employer's place of business.

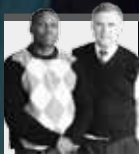
Of course, these defects can be remedied in part if the employee has a properly drawn up job description. On the other hand, it is not ideal to have compensation dependent on the existence of a job description.

Matters become even more complicated if injury to the employee occurs while he or she is undergoing training. The training may even take place after hours at premises other than that occupied by the employer. From these uncertainties, it is clear why it became necessary to amend the Act.

Another issue relates to the question of being injured while being transported to or from an emergency site. Section 22[5] deals with transportation:

*For the purposes of this Act the conveyance of an employee free of charge to or from his place of employment for the purposes of employment, by means of a vehicle driven by the employer himself or one of his employees and specially provided by his employer for the purpose of such conveyance, shall be deemed to take place in the course of such employee's employment.*

Therefore, an employee who sustains injury while being conveyed in transport provided by the employer qualifies for compensation. These provisions (especially those relating to compensating volunteers) also seek to encourage people to help during emergencies without being inhibited by thoughts of what could happen to them if they sustain an injury. <sup>SM</sup>



Legally Speaking is a regular column by **Professor Robert W Vivian** and **Albert Mushai**, both in the School of Economics and Business Sciences, University of the Witwatersrand. Robert W Vivian is a leading authority on insurance and risk management. He has written a number of books on South Africa's business history. Albert 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.





## BENEFITS OF CONSULTANCY SERVICES OUTWEIGH RISKS

**The ISO 20700 Guidelines for Management Consultancy Services offer a wealth of information for delivery of management consultancy services. Here are some insights**

**D**espite the unpredictable economic climate, there is still demand for management consulting services. At the same time, it is a cutthroat profession with a notion of survival of the fittest. Tom Lambert, author of *High Value Consulting*, maintains that the only reason for organisations to use external consultants is to gain significant added value. Certainly, any one venturing into providing consulting services knows that, without a value-added proposition, there's no chance of winning a contract.

While I recognise that there are many good practices out there that govern management consultancy service providers [MSCPs], I would like to preview some of the highlights that the ISO 20700 Guidelines for Management Consultancy Services, published in June 2017 by the International Organisation for Standardisation [ISO], has to offer by unpacking a clause-by-clause approach.

#### **CLAUSE 4: PRINCIPLES**

The clause introduces the principles by stating that critical phases of the typical consulting process take the form of

contracting, execution and closure, which together form the foundation on which the structure of the guidelines is based.

The foundation is augmented by additional aspects that the MCSP should take into account, including responsibility for resources with the proviso that, ultimately, the client remains accountable for decisions, outcomes and deliverables. These aspects are usually outlined in contractual obligations.

This clause further suggests policies that should guide MCSPs while carrying out their respective assignments, including those that relate to regulatory frameworks, stakeholder engagement and commitment, code of ethical and professional conduct, project governance, capability, communication, data protection and confidentiality, protection of intellectual property, social responsibility, health and safety, risk and quality management.

#### **CLAUSE 5: CONTRACTING**

The guidelines view the contracting phase as critical, since this is where the rules of engagement between client and MCSP are written. The rules form part of the agreement and usually include – but are not limited to – scope of work, cost





breakdown and payment terms.

It is vital to remember that the standard does not indicate certain prior activities before the contracting phase. Activities may include marketing of services to be provided, expression of interest, or even requests for quotations. Thus, the contracting process provides opportunities for MCSPs to assure clients of added value.

#### CLAUSE 6: EXECUTION

The execution phase is a follow-through of the agreed services outlined in the contracting phase. It is expected that during the execution phase, deliverables will be tracked through regular feedback and project meetings, with recommendations made.

There are instances where goalposts will be shifted. ISO 20700 refers to this as "refining the agreed work plan". This

tends to be a subject of contention, especially when it comes to additional or reduced man-days. Hence, flexibility in implementation of the assignment is unavoidable.

In sub-clause 6.5.3, Implementing the Work Plan, the standard expands on the steps a MCSP should follow with the client, namely prepare, analyse options, recommend, obtain decisions and implement. In my experience, I have found that the preparation stage offers a chance to assess the limitations of the assignment. This relates to a fact-finding exercise when "no-go areas" can be excluded.

Here is a practical scenario I once encountered: I was informed by a client that the risk management department had already identified risks and opportunities. Therefore, there was no need for me to identify them during the management system development project.

Incidentally, this awakened a reflection on my part on what consulting role I could play in the project, with the circumstances dictating my role. The lesson learned is that one might need to adopt and adapt to multiple consulting roles.

It is also a reminder that a client owns the consulting assignment and could keep certain areas out of its scope. In the guidelines, the execution phase is quite comprehensive and it's worth spending time understanding what it entails.

#### CLAUSE 7: CLOSURE

It is assumed that the assignment is completed and value-added deliverables achieved. The client should have benefited from the knowledge, expertise and impartiality of the consultant's engagement.

However, the guidelines state that the MCSP should not consider the assignment closed until the final closure topics have been addressed. These include legal and contractual matters; final evaluation and improvement; administrative matters, including payment of agreed fees where applicable; communication; intellectual property rights; and outstanding minor issues.

Also, don't forget to reflect on the following question: Did you add value and influence change when solving the basic problem for which you were contracted?

Neil Flanagan and Jarvis Finger (2004) in *The Management Bible*, remind us that change in organisations comes slowly and depends not only on the quality of the consultant's advice, but also on the ability to implement the advice.

#### KEY POINTS

The ISO 20700 guideline will remind MCSPs to keep in their professional lane when working with clients, so as to reduce risks in their consulting activities – but still add value. As O'Shea and Madigan remind us in *Dangerous Company: The consulting powerhouses and the businesses they save and ruin*: "Good advice is priceless – and bad advice can quickly lead a corporation into a threatening expensive world of dangerous company." <sup>SM</sup>



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## A+A: BIGGEST AND BEST EVER!

**The 2019 rendition of the A+A was the year's biggest health and safety event. CHARLEEN CLARKE reports that it was also the best**

**T**he A+A, which takes place every second year in Düsseldorf Germany, is always massive. It's best to get a good night's sleep before arriving at the show – and comfortable shoes are a must! There is so much to see and do, there are so many experts to meet and engage with, and there is so much to learn about the latest trends, products and services pertaining to safety, corporate security and workplace health ... it's an enormous but truly worthwhile event.

The most recent exhibition was more of the same, but it was even bigger than before! For the first time since its inception in 1954, it occupied 10 exhibition halls (remember what I said about those comfortable shoes?)

A total of 2 121 exhibitors from 63 nations – occupying more than 78 000 m<sup>2</sup> – were crammed into those halls where they met and interacted with over 73 000 trade visitors (of whom one in two came from abroad).

### STRONG EMPHASIS ON PPE

Personal protective equipment (PPE) is always huge at the A+A, and the most recent fair was no exception – with around 1 100 exhibitors displaying PPE.

"The volume of the German PPE market rose from €1,92 billion (around R31,33 billion) in 2016 to €2,23 billion (around R36,39 billion) in 2018. The PPE market continues to profit from companies' rising preparedness to better protect and educate their employees," notes Birgit Horn, director of A+A 2019.

Other factors favouring PPE sales are the rising numbers of older workers, for whom the market offers more and more

solutions, the implementation of modern assistance systems in production, the growing interest taken in social and ecological manufacturing conditions, as well as the development of disposal concepts for protective gear.

One of the companies displaying PPE was Showa, which showed its glove range. The company promoted its Eco Best Technology, an innovation that gave rise to the world's first biodegradable nitrile glove.

It also told visitors about its Breathex Foam Technology, a dual latex coating technology that allows the Showa 306 glove to be both breathable and liquid-resistant. The Showa 306 provides premium grip and dexterity with breathability in dry or wet environments and in all outdoor conditions.

The company also promoted the Showa Duracoil Series, which features a liner that is engineered by tightly wrapping multifilament polyester around a cut-resistant fibre, then reinforcing it with high-performance polyethylene. The technique is very important to user comfort; if not done correctly, the fibres will irritate the skin. This technology creates a premium lightweight yarn that offers comfort, durability and an increased cut protection.

Another interesting trend at the most recent A+A was the increasing sophistication of the occupational health and safety sphere. Virtual reality abounded, as did collaborating robotics (cobots), exoskeletons and special apps.

For instance, Universal Robots showed its latest cobot, the new UR16e. It has a 16 kg payload capability. At the Universal Robots stand, we learnt that more than 37 000 cobots are in





use every day, relieving employees of monotonous, repetitive or health-endangering tasks.

Japet Medical Devices, a French biomedical company, displayed the Atlas, an exoskeleton that offers users complete freedom of movement while helping to reduce back pain.

Also on the subject of reducing pain, BakkerElkhuizen exhibited the Evoluent D, a stylish vertical mouse. It is said to assist stiff forearms, sensitive wrists and/or tense muscles that



**LEFT AND ABOVE LEFT:** The team from AJ Charnaud launched the Alu-Safe dual protection (DP) molten-metal splash D3 E3 garment at the A+A Trade Fair.

**ABOVE:** The Dromex team promoted the company's Arc range, which is made from Dromex's Arc Protective Technologies fabric blend.

so many people experience after a day of working behind a computer.

Aeris, on the other hand, presented new standing seats, the Muvman Industry and Muvman Industry ESD, which relieve the strain on employees and do not restrict their freedom of movement. These seats automatically adapt to the user. This is made possible by a soft integral foam with an integrated flex zone that adjusts to the user's weight and sitting position.

#### FOUR COMPANIES FROM SOUTH AFRICA

There were four companies from South Africa at the A+A this time around, namely A J Charnaud & Co, Dromex, Shezi Industrial Holdings/Neptun Boot and Sweet-Orr.

The team from AJ Charnaud launched its Alu-Safe dual protection (DP) molten-metal splash D3 E3 garment at the A+A Trade Fair. It exceeds the CAT 2 [or PPE level 2 protection] level for electric arc flash protection, it's flame resistant, very comfortable and can be washed at home. It offers outstanding protection against molten-metal splash [both white and red metal]. AJ Charnaud is a long-time exhibitor at the A+A; it first participated some 20 years ago. The company is now exporting to over 60 countries.


Dromex was exhibiting at the A+A for the first time this year, and visitors appeared very impressed by its factory, which employs 500 people. Dromex promoted its Arc range, which is made from Dromex's Arc Protective Technologies fabric blend that has been engineered to offer protection against the thermal hazard of arc flash. Also on display was the Dromex fire workwear and PPE, which includes boiler suits, balaclavas, goggles, gloves and boots.





Shezi Industrial Holdings/Neptun Boot, the leading manufacturer of safety footwear (from PVC gumboots to safety boots), launched a new range of lightweight leather industrial safety boots. The SafeLite boots boast leather uppers and dual-density polyurethane soles. Offering full safety protection to the toes, these boots are hard-wearing, offer excellent grip and are slip-resistant. Neptun is a regular exhibitor at A+A; this was its sixth appearance at the fair.

Sweet-Orr launched new safety boots at the A+A. This is a new field for the proudly South African company, which has made its name in the field of protective clothing. It was the second time that the company exhibited at the A+A, and the team was pleased with the level of interest from visitors from sub-Saharan Africa, the Middle East, Eastern Europe and Russia. As Denver Berman-Jacob, executive director of Sweet-Orr, commented: "Exhibiting here for the first time started us on a journey; this is all about building relationships."

Speaking of building relationships, the next A+A will be held from October 26 to 29, 2021. See you there! 



**TOP LEFT AND RIGHT:** Shezi Industrial Holdings/Neptun Boot launched a new range of lightweight leather industrial safety boots.

**ABOVE:** The Sweet-Orr team launched new safety boots at the A+A.

**RIGHT:** The Showa 306 glove provides premium grip and dexterity with breathability in dry or wet environments.





# CHEMICAL PPE CHECKLIST



**Industries working with hazardous chemicals need to be particularly careful when acquiring personal protective equipment. Fortunately, there are head-to-toe solutions to assist**

**W**hile it is important for every industry to provide employees with personal protective equipment (PPE) that fits the application, this is particularly important for industries in which employees are exposed to hazardous chemicals. Contact with dangerous substances can cause serious harm, disability or even death.

Unlike other industries in which the incorrect equipment will simply be less effective, using the incorrect PPE when workers are exposed to chemicals will fail to provide any protection at all; thus placing the workforce in extreme danger.

The very first step to securing chemical-resistant PPE is to know which chemicals are present in the work environment, their impact and the length of exposure. It is, however, not enough to know only which chemicals are being used. Safety officers should also know about any additional chemicals that could be bi-products of the production process.

After conducting a comprehensive analysis, it is important to consult with the PPE supplier to ensure that the equipment meets all the relevant criteria. Depending on the chemicals present and the application, it might not be necessary to purchase a complete head-to-toe solution. It is still important, however, to consider the following equipment.

## PROTECTING THE CROWN

Hardhats are generally aimed at protecting the worker from falling objects or knocks to the head; however, it might also be necessary for the hat to protect against chemicals if there is a risk of chemicals dripping onto the worker's head.

If the hardhat is primarily used in a chemical-free area, it could still be necessary for the equipment to be resistant to all

the chemicals present in the workplace. An employee could, for example, enter the area housing the chemicals. A hardhat that is not resistant to chemicals can thus be damaged or compromised, which places the employee at risk, even after they have left the area containing the chemical.

## COVERING THE EYES

The face and eyes are arguably the most sensitive to harsh chemicals. Employees should be equipped with a splash guard, safety spectacles or a full-face mask. Depending on the face protection required, employers might also want to provide employees with respiratory protection.


## INHALING CLEAN AIR

Respiratory protection can include a half- or full-face mask and even oxygen supply. Respiratory equipment should be able to filter out any harmful chemicals. Inhaling hazardous chemicals can cause the throat to burn or the individual to suffocate.

## KEEPING HANDS CLEAN

Chemical-resistant gloves should be resistant to all the substances present, as they are the last-line of defence between the user and the chemical. It is also the equipment that needs to be the most resilient, as it will most likely come into contact with some or all of the chemicals.

## BODY PROTECTION

In addition to eye, respiratory and hand protection, employers might need to invest in either chemical-resistant overalls or hazmat suits to ensure that other body parts, such as arms or legs, are not exposed to chemicals that could harm the skin. 

## SOLUTIONS TO PREVENT SLIPS

**Although a common cause of workplace injuries, slips, trips and falls are often very easily managed by implementing some simple preventative measures. MARISKA MORRIS investigates**

**S**lips, trips and falls are some of the most common causes of workplace injuries globally and across all industries. Every sector is at risk of having an employee slip or trip and fall. The extent of the injury will depend on the fall, but could range from a bruised hip or a broken bone to a disability or death if a person should fall awkwardly down a flight of stairs, for example.

Fortunately, there are many ways in which companies can protect employees from slips and falls. The first step is prevention. To fully understand the slip or trip hazards in the office as well as the potential solutions, safety officers can conduct a slip and fall audit.

### ADDRESSING SPILLS

Limiting hazards or the possibility of an unsafe work environment is the best way to keep employees safe. To prevent slips, companies can ensure floors are kept clean and dry. However, this isn't always possible – especially in industries where liquids are used frequently. When a spill does occur, it should be cleaned up as soon as possible.

### CLEAR SIGNS AND RAILINGS

While the spill is being cleaned up, safety officers can ensure that there is clear signage to indicate the spill or a slippery area. In addition, posters can be placed strategically to remind and





To fully understand the slip or trip hazards in the office as well as the potential solutions, safety officers can conduct a slip and fall audit.

“

encourage employees to practise safe walking, for example by holding onto a railing when descending stairs.

In addition to providing well-anchored stable railings at staircases, companies can also erect railings on flat surfaces near areas at risk of spills or liquid, such as the factory floor.

#### MATTING SOLUTIONS

In industries where spills are unavoidable, anti-slip mats can be an essential preventative tool. There are various matting solutions for each industry and application. The COBA deluxe, for example, provides the ideal slip-resistance in wet or oily areas, while the K-Mat offers grip on greasy floors where liquids like grease, oils, fats and detergents are present.

When deciding on a solution, it is advisable to speak to a

matting specialist, consider the most common liquids found and investigate the potential health or safety concerns that can arise from the particular solution.

In the food industry, for example, it's important to implement a matting solution that is easy to clean and has minimal ridges to prevent the trapping of food particles or the build-up of bacteria. Installing a mat that doesn't meet the criteria can cause a secondary health hazard.

Even though most of the matting solutions have drain capabilities, it is still important to ensure the mats are kept clean and washed on a regular basis.

#### FOOTWEAR

Instead of, or in addition to matting solutions, employees could also be provided with safety footwear that is equipped with anti-slip properties. It is important to purchase footwear specific to each employee to ensure comfort. The safety boot should also fit the application.

Employees in the manufacturing or mechanical fields might require footwear with steel toe caps or anti-penetration midsoles, while workers in the food sector might require only a sturdy gumboot. Regardless of the industry, it is important to ensure that the space and depth of the thread on the shoe is correct.

If treads are spaced too close together or are too shallow, liquid will be trapped under the shoe instead of being directed to the outer edge of the outsole. This could cause an employee to slip. Once the correct footwear is purchased, it's important for the safety boots to be well maintained. Particular attention should be paid to the tread depth on the shoe.

#### TRAINING, TRAINING, TRAINING

Well-informed employees are less likely to place themselves in harm's way. Although it might seem redundant, there is value in reminding or training workers in walking safely. In general, employees should be discouraged from running, participating in horseplay or walking while distracted by, for example, a text message. They should hold onto railing when available.


When crossing a wet floor, workers can slow down even further, keep their knees slightly bent and feet pointed outward to increase balance. Employees should be discouraged from taking shortcuts through high-risk or restricted areas as well as carrying cumbersome or too many objects.

#### MAINTAIN WORK CONDITIONS

Aside from liquid spills, slips or trips can also be caused by other factors like poorly maintained floors – whether it is a piece of matting sticking up or particularly slippery tiles. It is important to have a person dedicated to ensuring the floors are in a good condition and that mats are replaced or repaired when needed.

Some companies may prefer to make this the priority of a contractor or facility manager. In this case, it is important to report any visible damage to the floor as soon as possible.

To further prevent trips, companies can also ensure all pathways are free of machinery or tools, the edges of mats are taped down and the office is well lit. Safety officers also need to consider the impact of the weather on safety.

During the rainy season, a lobby might become more slippery than usual as rain or water is tracked in with employees entering and leaving the office. 

# WASTE AN UNEXPECTED HERO OF GLOBAL WARMING

**As the world scrambles to fight the effects of global warming and reduce carbon emissions, plastic waste can prove a valuable ally in more ways than one. MARISKA MORRIS investigates**

**A**lthough plastic has received a bad reputation in the past few years, the durable, recyclable material offers many benefits. According to the World Economic Forum (WEF), it has played an invaluable role in reducing carbon emissions.

“Since 2004, for example, automobile fuel efficiency has climbed 29 percent while related greenhouse gas emissions have fallen by 23 percent. Plastics have played a huge part in that success by providing lightweight and durable alternatives to heavier materials such as steel,” the organisation states.

However, much of plastic’s potential is lost and overshadowed by the environmental impacts of unrecycled plastic.

## WHAT IS LOST

The WEF estimates that the value of global plastic waste ranges between US\$ 80 billion (R1,16 trillion) and US\$ 120 billion (R1,74 trillion). In addition, the material is the cause of a global environmental crisis. It is estimated that eight-million tonnes of plastic spills into the world’s oceans each year, which suffocates the wildlife and contaminates food sources.

By recycling as little as one tonne, it’s possible to reduce CO<sub>2</sub> emissions by between 1,1 and three tonnes. Oil is also used in the manufacture of plastic. An estimated six percent of global oil consumption is used in all plastic production – the same percentage consumed by the global aviation sector.

The WEF explains: “If the current strong growth of plastics usage continues as expected, the plastics sector will account for 20 percent of total oil consumption and 15 percent of the

global annual carbon budget by 2050.” Recovering plastic waste is thus vital to the environment, but also holds incredible financial opportunities.

## SOUTH AFRICAN PLASTIC CONSUMPTION

Although a small player in the plastic production globally, South Africa still consumes roughly 1,5-million tonnes of plastic annually. Fortunately, the country is a forerunner when it comes to recycling plastic, with 46,3 percent of all plastic products recycled in 2018, according to Plastics SA.

The biggest contributors to the success of recycling in the country are the informal waste pickers who, according to the Department of Environmental Affairs, intercept 68 percent of recyclables.

Unsurprisingly, the packaging industry is the biggest consumer of plastic at 53 percent, according to the department’s estimates. It is followed by the building and construction industry at 13 percent.

While the packaging industry investigates biodegradable alternatives to reduce plastic, one construction company plans to increase its plastic use in the best possible way – by intercepting plastic waste.

## PLASTIBRICK

In 2016, Kekeletso Tsiloane prototyped the first PlastiBrick – an invention that uses recycled plastic to manufacture bricks that are strong, durable, fire-retardant and environmentally friendly. The production process requires





only melted plastic and sand.

"There is no water used in the production of PlastiBrick; thus, along with reducing plastic waste, it also saves water," Tsiloane explains. "These environmentally friendly bricks are denser than normal bricks and have a lower rate of water absorption to give buildings a longer lifespan."

As the brick is manufactured from plastic, it also provides some insulation to make buildings energy efficient. These bricks have also been tested and approved by the South African Bureau of Standards.

Ramtsilo Manufacturing and Construction sells interlocking and Bevil pavers, cement stock and maxi bricks manufactured from plastic. The products have been sold to small-scale contractors. The construction industry worldwide is pushing for more environmentally friendly solutions.

### GREENER BUILDINGS

A Swedish construction company is placing plastic spherical voids between concrete slabs to reduce the amount of concrete used and, thus, the carbon emissions produced [see the SHEQ MANAGEMENT HANDBOOK 2020 for more information]. Cement is the source of eight percent of global CO<sub>2</sub> emissions – more than jet fuel!

A group of scientists at the University of Colorado Boulder, in the United States (US), are taking it a step further with "living concrete", which consists of sand, gel and bacteria. It is more environmentally friendly than concrete – the second most-consumed material globally after water.

Sand and hydrogel were used in the experiments to build

a structure in which cyanobacteria can grow. These green microbes live in water and manufacture their own food. By using living organisms, the building material is self-healing. When a lab-grown brick was split, it grew into two complete bricks with the help of extra sand, hydrogel and nutrients.

While there are still some drawbacks, these living materials can also help fight global warming by absorbing carbon dioxide from the air. This is not the only innovation that looks to fighting carbon emissions, although the other alternative is more surprising.

### LOOKING TO THE PAST

Experts are suggesting wood as the building material of the future, according to Fast Company. Although the switch to this age-old material will require strict, sustainable forest management, it does have the opportunity to store carbon.

According to experts at the Potsdam Institute for Climate Impact Research in Germany, timber buildings act as carbon sinks in a similar way to forests by capturing carbon emissions.

Kristin Toussaint writes for Fast Company: "A five-story residential building made with laminated timber can store up to 180 kg of carbon per square metre – three-times more than natural forests with high carbon density."

Another benefit of reverting to wood as a building material, is that the waste can be used to manufacture paper or insulation, thanks to the innovation for the GO Lab Timber Pure Technologies plant in New York, US. The insulation can be recycled, is biodegradable and its production doesn't expand the carbon footprint. <sup>SM</sup>




# GLOBAL UNITY UNDER THREAT AT UN CLIMATE CHANGE CONFERENCE

Differing views hold sway as negotiators fail to reach consensus on measures to reduce global warming







The latest annual United Nations (UN) Climate Change Conference, COP25 – held in Madrid, Spain in December – became the organisation's longest when, following more than two weeks of terse negotiations, it concluded 44 hours later than planned.

Negotiators failed to achieve many of their primary aims. Central among these were to send a message of intent regarding the UN's goals to limit global warming, and to persuade the world's largest carbon-emitting countries to pledge to tackle climate change more forcefully. Delegates representing about 200 nations attended the event.

With delegates unable to reach consensus on many points, negotiators deferred decisions to COP26, which is scheduled to be held in November this year in Glasgow, Scotland. UN secretary general António Guterres expressed his disappointment at the outcome, saying that the international community had lost an important opportunity to show increased determination to tackle the climate crisis.

Carolina Schmidt, Chile's environment minister who chaired the conference, echoed the sentiment. "We are not satisfied," she said. "The agreements reached by the parties are not enough."

The lack of impetus added fuel to a number of vigorous protests held both inside and outside the COP25 venue, as climate activists – including Swedish teenager Greta Thunberg, who sailed across the ocean in a yacht to deliver a speech at the conference – demanded firm, quick action to put an end to the planet's warming.

The UN's latest Environment Programme report – released just prior to the start of COP25 – showed that climate change goals set out in the Paris Climate Accord were fast slipping out of reach. However, as negotiators battled to finalise the complex set of rules that govern the Paris Agreement – which would help to reinforce each of signatories commitment to reduce global warming – countries squared off against each other on a number of sticking points, one of the foremost being what constituted a fair and transparent global carbon trading system.

Also, arguments dragged on about how to provide funding to poorer nations already coping with rising seas, crippling droughts and other consequences of climate change, with South African cabinet minister Barbara Creecy – in her capacity as president of the African Ministerial Conference on the Environment – imploring: "Africans urgently require new, predictable and adequate financing for adaptation beyond voluntary donor assistance."

On the bright side, moves by some participants at the conference drew a positive response. These included representatives of 177 companies from the private sector, who pledged to cut carbon emissions in accordance with the Paris Agreement.

Also received positively was the announcement by Schmidt that 39 countries had committed to include oceans in their climate change agendas, with a decision taken to convene a meeting on the subject at an intercessional meeting to be held in Bonn, Germany, in June, where plans of action to strengthen adaptive initiatives will be considered.

While Denmark's declaration that it had adopted a new climate law – which sets a legally binding target to cut emissions to 70 percent below those of 1990 levels by 2030



**RIGHT:**

Climate change goals set out in the Paris Climate Accord are fast slipping out of reach ... and the implications for the environment are dire.



– was greeted with enthusiasm, a general lack of progress regarding many other points led to simmering tensions in the conference chamber, with the definition of ambition being one of the issues in the spotlight.

In part, the tension reflected interpretations of the word, with delegates from many developed countries tending to view the concept mainly as a means to increase efforts to cut emissions this year, so as to close the gap in meeting climate goals.

Others, particularly from developing countries such as India and the African bloc, argued for a broader interpretation that also covered provision of finance for climate initiatives, pointing out that the failure of many developed countries to fulfil climate change pledges in the pre-2020 period had left the world a long way from meeting its global warming goals.

The split extended to the format and content of climate change reporting requirements under the Paris Agreement. Talks on common reporting tables and common tabular formats broke down, with delegates from a number of countries pleading for more time to find agreement and China insisting that the negotiations be reconvened this year. Talks will resume at Bonn in June.

By the end of the conference's second week, there was a strong sense that many richer nations were not taking the event's "Time for Action" motto seriously. Delegates from small island states and African countries were among those who expressed disappointment.

At a press conference convened by the Association of Small Island States, the group's chief negotiator, Carlos Fuller, said he feared having to concede on issues that "would undermine the very integrity of the Paris Agreement".

In a statement, he said: "COP25 is demonstrating very little ambition. We are appalled at the state of negotiations... What's before us is a level of compromise so profound that it underscores a lack of ambition and a lack of seriousness about the climate emergency and the urgency of securing the fate of our islands."

Equally, ahead of the conference many observers had expected a key focus to be a decision regarding rules for Article 6 – covering carbon trading markets and other forms of international cooperation – the last section of the Paris Agreement for which finalisation is needed.

Arguments intensified as some countries accused others of pushing for accounting ambiguities that they said would weaken transparency and mask emissions quantities in a way that would undermine the integrity of the agreement. Officials ultimately waived resolution on the issue – just as they did a

year ago – even though scientists at the conference had made it clear that there was no longer time for delay, especially after a decade in which emissions had continued to rise.

By the end of the talks, Article 6 had become one of the highest profile casualties of the conference. With parties falling short of reaching a deal, the carbon trading issue will be taken up again in June at the UN's intercessional meeting in Bonn and will also be on the agenda at COP26 in November.


Another decision that was pushed forward was the matter of common timeframes for climate pledges. Ahead of COP21 in Paris, countries submitted their nationally determined contributions [NDCs] in an ad hoc fashion, covering a range of timeframes extending to 2025 or 2030. At COP24 in 2018, they agreed that all NDCs should cover a common timeframe from 2031, with the number of years to be decided later.

Countries including Russia and Japan were reported to favour 10-year timeframes, whereas Brazil and many vulnerable countries – including those in Africa – argued for shorter terms, so that climate change strategies could be adapted and improved in light of falling technology costs.


At a briefing held during the conference, Tosi Mpanu-Mpanu, lead negotiator for the Democratic Republic of Congo, told journalists: "It is quite an important issue for us... We are more for NDC cycles of five years, because if you go for 10-year cycles, you lock in weak ambition."

He said that pledges should be reviewed every five years in light of the latest science and technology, with ambition ratcheted up accordingly. He added: "When you come here you always reach for the moon and, at the end of the day, you always reach a fence – but some elements are quite fundamental and important for us."

During the talks, delegates from many small countries spoke with frustration about the tempo and tone of proceedings, saying they had been prevented from attending key negotiations and rebuffed by major carbon-emitting nations. However, most displays of outrage came from young protesters, who held news conferences, chanted and pressed for sit-downs with negotiators.

Interestingly, one of the few promising developments to emerge during the conference came not from Madrid, but from Brussels, where leaders of the European Union [EU] pledged to eliminate the entity's carbon footprint by 2050. Though the announcement revealed serious differences between some countries – coal-reliant Poland having refused to sign the agreement, for instance – it provided an example of the measures that one of the world's biggest carbon emitters was taking in its bid to increase reduction goals. 





# MANAGING SUBSTANCE ABUSE IN THE WORKPLACE

**OHS professionals have an important role to play in providing remedies in the workplace for substance abusers**

**T**hough an employee's personal life usually doesn't fall within the responsibilities of an employer, individuals who use drugs or alcohol invariably carry side effects with them into the workplace. Studies have found that consumption of alcohol and the use of drugs during the hours immediately before work, at work (including lunch breaks), during specific occasions at work (such as company parties), and during travel to and from work, may have a negative impact on workplace activities.

Research published last year in Belgium by health and safety professionals Marie-Claire Lambrechts and Lode Godderis – who obtained data from 5 367 workers related to job-related consequences of alcohol and drug use – found that being late for work, absenteeism, loss of productivity, injuries, conflicts with co-workers and sanctions by employers were common threads among those who admitted to having a substance-abuse problem.

"The odds of job-related effects were 3,6-times greater than the odds among workers without this indication," the researchers noted in their report. They believe that it is in society's interests to prevent or tackle such problems.

"Given the impact of substance use on public health, it is also a topic for health promotion, since employees who are in good health are more productive and take fewer days sick leave. They are more likely to be motivated and more engaged at work. Also, healthy employees reduce the cost for employers," the researchers noted.

They said that with the right policies in place, problems in the workplace resulting from the abuse of alcohol or other drugs by employees can be prevented or spotted in good time, thus increasing the chances of recovery.

According to the South Africa Labour Guide, it is not only heavy drinking that might result in significant mishaps at work – even low quantities of alcohol consumption have resulted in poor performance.

Quoting an international study involving airline pilots who were asked to perform routine tasks in a simulator, the Guide points out that, before consuming alcohol, only 10 percent of the subjects were unable to perform all tasks correctly. When their blood alcohol concentration was increased to 0,10/100 ml, the figure rose to 89 percent. And a test conducted when the alcohol was deemed to have left their bodies showed that 68 percent failed to perform all tasks as they had been instructed.

"Clearly this reveals that substance abuse should not be seen as only affecting heavy users, as incidents can result from the consumption of low quantities of alcohol as well. Thus, it becomes important for employers to implement preventative measures and management programmes rather than just concentrating on the identification and rehabilitation of heavy users," the Guide says.

From this perspective, it's clear that the workplace can play an important role in preventing and providing remedies for substance abusers, and it's not surprising that the International Labour Organisation has developed a code of conduct aimed at helping employers to manage alcohol and drug issues.

According to the code, employers – together with employee representatives – should develop, in writing, a company policy on alcohol and drug abuse. If possible, the policy should be formulated with the help of medical personnel and occupational health and safety experts who have specialised knowledge regarding the subject. The policy should include information and procedures on:

## **Measures to control substance abuse in the workplace through good employment practices:**

The code advises that where it is shown that certain job situations may contribute to substance abuse, the employer should identify and take appropriate preventative or remedial action.



Workers and their representatives should also not formally or informally support behaviour which incites, encourages or otherwise facilitates the harmful use of alcohol or the abuse of drugs on the premises. When an employee voluntarily discloses a previous history of substance abuse, the employer should take steps to ensure that he or she is not exposed to a working situation which could exacerbate the problem.

#### **Restriction on alcohol, legal and illegal drugs in the workplace:**

In consultation with employees, the employer should consider restricting or prohibiting the possession, consumption or selling of alcohol or drugs in the workplace. Employers should also consider withdrawing alcohol as an item for expense account reimbursement or restrict it to specific situations. Employers should also be prevented from paying any wages in the form of alcohol or drugs.

In instances where medication might result in workplace impairment, the employee should consult a health professional and inform his or her manager of the possible consequences.

#### **Prevention through information, education and training programmes:**

The code advocates that employers should promote safety and health in the workplace through information, education and training programmes, which discuss the physical and psychological effects of alcohol and drug use.

These programmes should also include the following information:

- General and specific rules and regulations regarding alcohol and drugs in the workplace;
- Suggested steps to prevent problems from occurring; and
- Services available to help employees with substance abuse problems both within and outside the workplace.

"It is recommended that managerial staff should be provided with additional training to assist them to identify changes in the individual's performance and behaviour. This training should provide the necessary skills to respond to questions regarding the company's policy on alcohol and drugs, as well as to be able to support a recovering worker's needs and monitor that individual's performance when he or she returns to work," the code advises.

Additionally, the code recommends that training should be provided to employee representatives to enable them to assist workers who may require help, as well as to identify processes

or conditions that might need to be changed or improved to prevent, reduce or better manage problems associated with alcohol and drug use in the workplace. "Training would further assist employee representatives to explain and respond to questions related to company policies regarding alcohol and drugs," it states.

While the study by Lamprechts and Gooderis acknowledges that it is not easy to deal with employees who are problem substance abusers, they say occupational health professionals could play a greater role in the prevention and management of substance abuse among workers – notably through occupational physicians [OPs] or equivalents who are regularly in contact with the working population, mostly in a preventive medical setting. <sup>SM</sup>

### **SOME MYTHS AND FACTS ABOUT PROBLEMATIC SUBSTANCE USE AND ADDICTION**

**Myth:** Problematic substance use is a bad habit, and is the result of moral weakness and a lack of personal self-control.

**Fact:** It is attributable to a variety of factors such as genetic susceptibility and social circumstance.

**Fact:** Like diabetes or heart disease, addiction is a chronic, life-threatening medical disease. People with an addiction are dependent on the substance.

**Myth:** People who use substances problematically, or have an addiction, simply lack the willpower to stop using these substances.

**Fact:** The majority of people need structured, professional help to address substance use issues.

**Myth:** People with problematic substance use issues look like street addicts or homeless individuals.

**Fact:** People with problematic substance use issues often do not stand out in their physical appearance and commonly look well kept, appearing much like everyone else.



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# MOST ESSENTIAL BATH EVER TAKEN



**While prevention is always the best approach, companies should be equipped to reduce harm once an accident occurs. MARISKA MORRIS takes a look at how safety showers and eyewashes can assist employees who are exposed to hazardous chemicals**

**A**lthough precautionary procedures and protective clothing remain the most important aspects of workplace safety, employers should also be prepared to respond when an accident occurs, whether this means stocking a burn kit, providing first aid or installing eyewashes and showers. The latter is particularly important for industries in which employees are exposed to hazardous substances.

When harmful chemicals make contact with the eye, the individual has seconds to respond. In fact, according to the Canadian Centre for Occupational Health and Safety (CCOHS), damage to the eye can occur within 10 to 15 seconds after contamination. Failure to respond in time could worsen the situation and even result in blindness.

As technical sales director at Spray Nozzle, Karl Loubser, points out: "Those first seconds after exposure to a hazardous substance – especially a corrosive one – are critical. Delaying treatment, even for a few seconds, may cause serious injury."

"Though not a replacement for primary protective equipment, such as eye and face protection, these baths are required as

a very necessary back-up to mitigate the effects of accidental exposure to harmful chemicals. Emergency showers and eyewash stations provide on-the-spot decontamination that allow workers to flush away hazardous substances that could cause injury."

To ensure eyewashes and showers are effective, employers need to understand the strict requirements associated with them. First, the CCOHS points out that a shower is not an acceptable alternative to an eyewash.

"Emergency showers are designed to flush the user's head and body. They should not be used to flush the user's eyes, because the high rate or pressure of water flow could damage the eyes in some instances," the CCOHS states. Ideally, companies should conduct a risk analysis to determine whether a shower, eyewash or both are required.

There are also combination units available, which are ideal for work environments where employees might not have detailed information about the hazards, for example a mine.

Each unit also has very specific design requirements to ensure that it is easy to use and effective. An eyewash, for







example, should deliver fluid to both eyes simultaneously while the worker keeps his or her eyelids open with both hands. It should activate in less than a second and remain active for as long as needed.

The Spray Nozzle product offering includes an eyebath with a hands-free solution. Loubser notes: "A Spraydrench platform operated or fully automatic safety shower alleviates the need

to locate and activate a valve physically, which saves valuable exposure seconds. It allows the individual to use both hands to hold his or her eyes open or remove contaminated clothing in accordance with the correct safety standards."

In addition, the Spraydrench product range provides solutions to extreme water temperatures, harsh working environments, space constraints, remote locations and access to portable water. Loubser explains: "The American National Standards Institute standard requires the use of tepid water or flushing fluid for all safety shower and eyewash applications.

"Spray Nozzle offers various special valve options to ensure the delivery of tepid water to Spraydrench emergency equipment to, for example, protect

against excessive hot water that could scald an injured worker or possibly compound chemical reactions. There are also freeze-protection and over-temperature valves."

The range further includes corrosion-resistant units for harsh conditions; smaller eyebaths and showers for workplaces with limited space; and a gravity-fed safety shower and eyebath for remote locations with limited access to water.

"To ensure awareness of an incident or safety shower activation, a strobe beacon and alarm with control box and connection to a programmable logic controller setup are also available if necessary," Loubser says.

Although there is a wide range of showers and baths available to ensure employees can safely decontaminate themselves, many employers see these as a grudge purchase, and this might lead to the purchase of a unit ill-equipped for the environment.

"Some common mistakes made when purchasing a safety shower or eyebath include purchasing equipment that is not designed in accordance with the necessary safety standards; acquiring the incorrect equipment for the application; improper installation [including incorrect placement and insufficient water supply or pressure]; and no regular inspections or maintenance," Loubser points out.

Loubser advises employers to first do their homework before making a purchase. "Ask for qualified advice in order to select the right unit for your specific requirements," he says.

"Use a reputable company of a long track record with proven success in this line of products. Don't skimp on getting the correct and quality equipment; it could save lives. Regularly train your staff to maintain and use the safety Shower and eyewash equipment correctly," he concludes.

With its ISO 9001:2015 quality management standard obtained in September 2018 [and kept], Spray Nozzle meets the manufacturing standards set out by the United States, Germany and Europe. It is ideally placed to advise businesses on shower and eyewash equipment. 

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