August 2025 | Vol.19 No.4

safety solutions

health & safety at work

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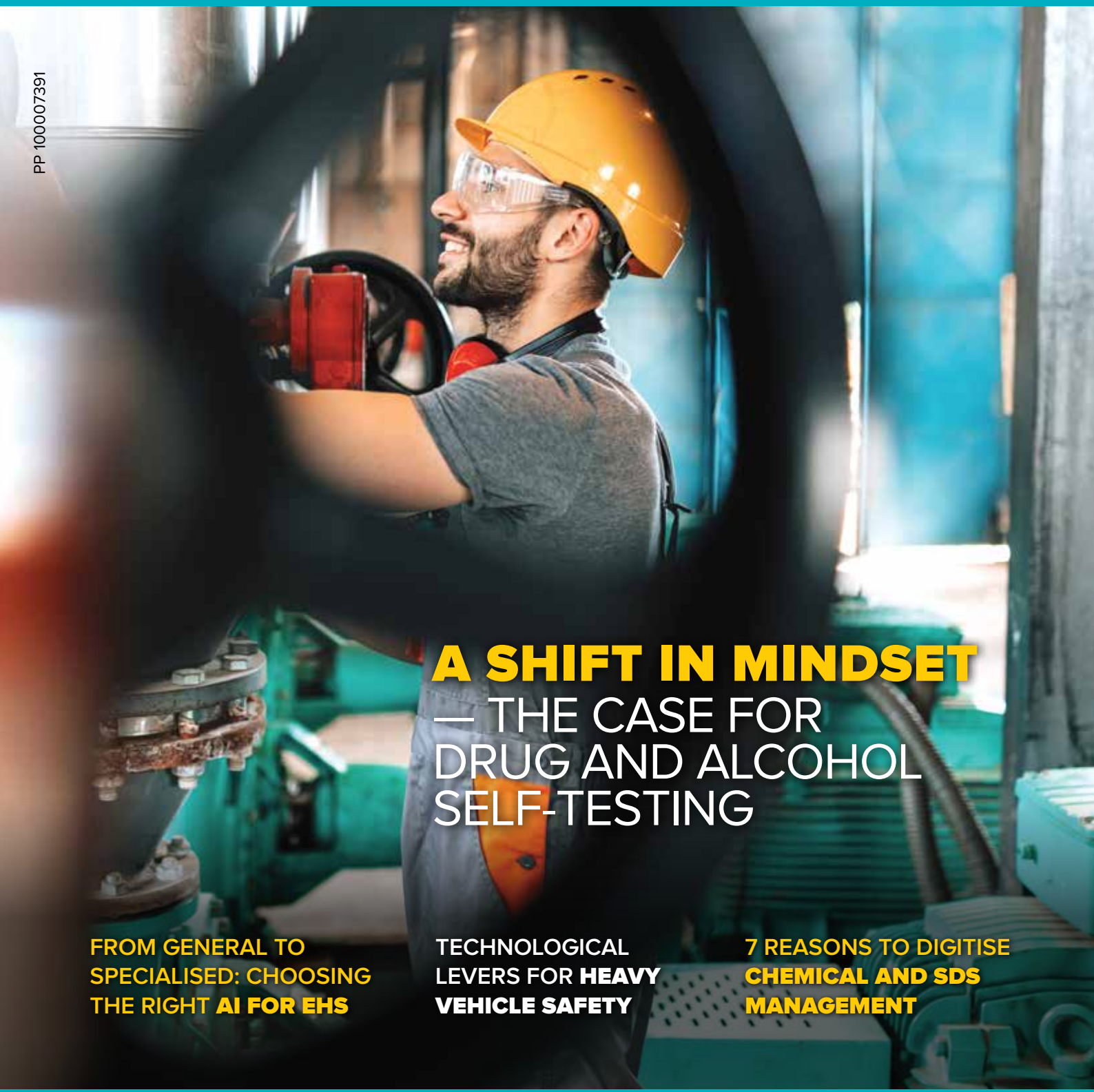

A SHIFT IN MINDSET — THE CASE FOR DRUG AND ALCOHOL SELF-TESTING

FROM GENERAL TO SPECIALISED: CHOOSING THE RIGHT **AI FOR EHS**

TECHNOLOGICAL LEVERS FOR **HEAVY VEHICLE SAFETY**

7 REASONS TO DIGITISE **CHEMICAL AND SDS MANAGEMENT**

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FROM THE EDITOR

Welcome to the August 2025 issue of *Safety Solutions*, which includes a focus on environmental risk/chemical safety and machine & transport safety.

In this issue, Gerry Mezzina, Senior Marketing Manager at HSI Donesafe, explains why switching to a digital, cloud-based system for chemical and SDS management isn't just about moving things online — it's about making safety faster, smarter and more in tune with how real-world work gets done.

Also onboard for our August issue is Luke Olsen, Managing Director APAC of Microlise, setting out some key existing and emerging technological heavy vehicle safety levers; Matthew Salihi, Touch Biotechnology CEO, making a case, with a focus on machine operation, for a shift to a more proactive, self-testing approach to drugs and alcohol — an approach that acknowledges safety starts with the individual; and Egor Nazarov, Senior Head of Marketing at Soter Analytics, explaining why understanding the difference between general-purpose AI models and specialised, industry-specific 'vertical AI agents' is essential for EHS professionals aiming to make informed, strategic decisions.

We also have a suite of case studies, from a laser bird deterrent used to boost tram depot safety, to a free South Australian psychosocial risks course helping workers, to an award-winning traffic management training review. Plus, we cover some promising, recent research — including a trial of medication by The Alfred researchers that, they believe, could bring patients closer to a viable treatment for silicosis.

Of course, there's our usual breadth of coverage as well, across news and events, further articles, research and case studies, and product innovations.

Happy reading.

Dr Joseph Brennan, PhD
Interim Editor, Safety Solutions
ss@wfmedia.com.au

IN THE NEWS


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2024 REVIEW OF THE DUST DISEASES SCHEME — FINAL REPORT

The final report of the Standing Committee on Law and Justice's 2024 Review of the Dust Diseases Scheme is now available. In a statement released by the NSW Minister for Industrial Relations, Sophie Cotsis, the government said it welcomed the report, which aims to deliver stronger protections and better support for workers across the state affected by deadly dust diseases.

The report had two focus areas, namely support available to younger workers within the Scheme and other risk areas for silicosis — including, but not limited to, tunnelling and quarrying. Recommendations were also made, which the government said "will guide reforms that better protect workers in high-risk industries such as construction, mining and tunnelling".

Career and educational counselling were among the key recommendations, with support continuing throughout retraining, even if workers gain paid employment during the course. Also recommended is that vocational services be expanded — including personalised career support and job-seeking assistance, for younger workers particularly.

To improve fairness, legislative changes were recommended as well. These include the removal of the requirement that to receive full benefits, exposure to dust occurred entirely in NSW; ensuring that weekly benefits align with those in other states and territories; and the inclusion of new dust-related conditions, such as chronic renal disease, mycobacterial diseases, and silica-induced autoimmune and airways diseases.

It was also recommended that the government strengthen SafeWork NSW's role in resolving disputes (under the *Work Health and Safety Act 2011*) between authorised entry permit holders and persons conducting a business or undertaking, to facilitate the provision of documents to workplace entry permit holders if there is suspected contravention.

A working group — convened by icare within six months — that brings employer groups, health experts, support organisations and unions together to design retraining and education programs for affected workers was also recommended, as was the need for enhanced mental health support for workers and families that is integrated into standard claims management, and culturally and linguistically tailored.

The report called for a national dialogue with the Commonwealth to, regarding workers compensation, preserve pension or non-monetary entitlements for dust disease sufferers; an accreditation framework for health monitoring providers; and a requirement that lung testing results be shared with icare — to improve surveillance and follow-up.

The government response to the report is expected in September 2025.


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MACHINERY HEAD-CRUSH FINE ALMOST DOUBLED ON APPEAL

A fine which was issued in Victoria last year — following a worker suffering life-threatening crush injuries when his head was caught in machinery — has been almost doubled on appeal. Class Plastics (Aust) Pty Ltd was fined $40,000 without conviction in the Sunshine Magistrates' Court in December 2024. This was after pleading guilty to a single charge of failing to maintain plant that was safe and without risks to health. Melbourne County Court set aside the original sentence on 11 April, as the result of an appeal, convicting the company and imposing a $75,000 fine. The company was also ordered to pay $4000 in costs.

This incident occurred in April 2022 when a supervisor's head was caught between a moving bar and the machine's frame while attempting to rectify an issue with a plastic blow moulding machine at the company's Truganina factory. The man suffered a traumatic brain injury, fractured skull and intracranial bleeding that required immediate surgery. The machine's interlock system — which should have stopped it from operating while the access doors were open — was disconnected and the sensors that should have activated it had been covered with tape, a WorkSafe Victoria investigation found.

IN THE NEWS

APPRENTICE ELECTRICIAN DEATH LEADS TO ALMOST $1M IN FINES

Following separate investigations by Energy Safe Victoria and WorkSafe Victoria into the death of an apprentice electrician working unsupervised in 2021, two lift companies have been fined. Facing Victoria's Supreme Court on 27 June, Nordic Elevator Services Pty Ltd and Nordic Elevators Pty Ltd were ordered to pay $30,000 and $20,000 after pleading guilty to four and six charges, respectively, under the *Electricity Safety Act 1998* and Electrical Safety (General) Regulations 2019. Failure to effectively supervise the apprentice and illegally working on energised electrical equipment were included in the offences.

Additionally, Nordic Elevator Services and Nordic Elevators were fined a further combined $880,000. This was after they pleaded guilty to additional charges under the *Occupational Health and Safety Act 2004* — two for the former and one for the latter. These offences relate to failing to provide the systems and necessary supervision for safe work. Justice Gorton highlighted the seriousness of these offences in sentencing, as well as the risk when unsupervised apprentices undertake electrical work. "The risk … is obvious: the risk is of death," Gorton said.

After being alerted to the death of a 21-year-old apprentice electrical worker by emergency services, Energy Safe Victoria and WorkSafe Victoria opened their investigations on 22 March 2021. The apprentice had been electrocuted while repairing a faulty car lift at the back of a West Melbourne apartment block. The fourth-year apprentice had been instructed by a senior technician to attend the site and report back after the lift doors got stuck open, according to facts tendered to the court.

Attempts were made by the apprentice to source a spare part and repair the lift on his own — after nearly seven hours, the man's body was found on top of the car lift. Energy Safe Compliance Officers who attended the scene found that the electrical equipment had not been isolated and the apprentice was carrying out installation work on energised equipment without supervision. "This incident is [a] tragic reminder that apprentices are the most vulnerable of all electrical workers and there is no excuse for leaving them unsupervised," Energy Safe Victoria CEO Leanne Hughson said.

Energy Safe Victoria has recently introduced updated apprentice supervision requirements, which come into effect on 1 September 2025. These include changes to supervision levels and ratios. Any electrician, company or contractor that breaches these rules can face penalties. "Our supervision requirements for electrical apprentices are focused on improving safety outcomes to prevent an incident like this occurring again," Energy Safe Victoria said.

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STEEL-BENDING MACHINE'S PARTIAL DEGLOVING LANDS $90K FINE

In July 2023, a worker at a Morwell workshop was operating a machine designed to bend lengths of reinforced steel into different shapes. On the day of the incident, the worker was tasked with conducting a new type of bend he had not previously performed. When the worker noticed during the process that one of the steel bars begin to twist outwards, he used the palm of his hand to guide it back towards the machine — as he was taught. When he did this, the bar's wired components caught onto the worker's safety glove and pulled his hand into the machine's rollers, resulting in a partial degloving of the worker's left index finger and the worker being taken to hospital for surgery.

In the WorkSafe Victoria investigation that followed, it was revealed that while a guard was available for the machine's danger area, it was an optional feature that had not been fitted onto the machine since its purchase. The instructions the company had given to the worker also directly contradicted the machine's operating manual, which warned about the risk of entanglement, instructing everyone — including operators — to stay at least two metres away from the machine while it was operating.

It was also revealed that while initial training had been provided to the company by the supplier of the machine, since then, workers had been training other workers based on how they were taught and there was no consistent or documented training or emergency procedures in place. After pleading guilty to one charge of failing to provide and maintain safe plant and one charge of failing to provide workers with necessary information, instruction and training, the company — Retired AKZ Pty Ltd, formerly known as AKZ Reinforcing Pty Ltd — was sentenced in the Latrobe Valley Magistrates' Court on Wednesday 2 July.

Retired AKZ had a history of workplace health and safety offending, the court heard, and was last December convicted and fined $146,000 over three separate similar incidents with bending machines at the workplace. Over this incident, the company was convicted and fined $90,000. The company was also ordered to pay costs of $5023.

IN THE NEWS

FATAL FALL FINE NEAR QUADRUPLED TO $250K ON APPEAL

A 66-year-old maintenance manager was working alone on the roof of a shed at the workplace in June 2022. The maintenance manager was working without any fall protection, attempting to replace polycarbonate roofing sheets. He was taken to hospital where he underwent brain surgery after falling through one of the sheets, 3.3 metres to the floor below. He died a few days later.

The maintenance manager did not have any qualification in roofing, a WorkSafe Victoria investigation found, and a Safe Work Method Statement (SWMS) had not been prepared for the task. It was reasonably practicable, the court heard, for the company to reduce the risk of a fall by using a fall arrest system, such as a safety harness.

Van Berkel Distributors Pty Ltd had been fined $65,000, without conviction, in February 2025 in the Melbourne Magistrates' Court; the company had pleaded guilty to a single charge of failing to reduce the risk associated with a fall by using a fall arrest system. In June 2025, following an appeal, the Melbourne County Court set aside the company's original sentence and ordered it to pay a fine of $250,000 — without conviction.

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VICTORIA OFFERS WORKERS FREE MENTAL HEALTH SUPPORT

A pilot program that is part of WorkSafe Victoria's Return to Work Victoria initiative allows the state's workers to access up to four sessions via the Worker Mental Health Support Helpline. Work-related mental injuries are a growing challenge, having increased over time and currently making up 18% of all workers compensation claims in the state. Following a public tender process, TELUS Health was chosen to deliver the helpline, which offers free and confidential 24/7 support.

Described as similar to an Employee Assistance Program, the service is now available for workers in small and medium-sized businesses that don't already have similar support in place, with manufacturing, construction and health care being among the state's target industries — recognised as high risk for workplace mental injury. Eligible workers can access the service's 24/7 support via telehealth or online by calling 1800 318 421.

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INAUGURAL SAFEWORK NSW COMMISSIONER TAKES UP ROLE

On 14 July, the inaugural SafeWork NSW Commissioner, Janet Schorer, took up her role, bringing more than 27 years of public sector agency experience to the position — including in the Department of Premier and Cabinet and the Department of Family and Community Services. The commencement of Schorer as inaugural SafeWork NSW Commissioner follows SafeWork NSW becoming a standalone regulator on 1 July.

As the incoming commissioner, Schorer will address compliance, policy, best practices and meaningful engagement with workers, unions, businesses and the Family and Injured Workers Support and Advisory Group — to make for a stronger and more robust organisation. "I am honoured to be joining SafeWork NSW as we take our first step towards reshaping the agency into the strong and robust regulator needed to make workplaces secure, safe and healthy," Schorer said.


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DON'T BE BLINDED BY THE BINDER

— 7 REASONS TO DIGITISE CHEMICAL AND SDS MANAGEMENT

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Switching to a digital, cloud-based system for chemical and SDS management isn't just about moving things online. As **GERRY MEZZINA**, Senior Marketing Manager at HSI Donesafe, explains, it's about making safety faster, smarter and more in tune with how real-world work gets done.

If you're still managing your chemicals with folders, spreadsheets or paper SDS sheets tucked in dusty binders, you're not alone. But you are at risk — and likely wasting more time than you realise. Here are seven ways a digitised SDS and chemical management system can help keep your workplace safe.

1. Find what you need, fast

When an incident happens or someone needs to know how to handle a spill, speed matters. With a digital system, SDS sheets and chemical records are just a few clicks away — not buried in a filing cabinet or locked in someone's inbox. Site teams, safety leads and even first responders can get the info they need on the spot, from any device.

In a crisis, seconds count. Fast access to accurate safety data could mean the difference between a near miss and a medical emergency.

2. Always up to date

One of the biggest risks with SDS sheets is using an out-of-date version. Hard copies and shared drives don't update themselves — cloud-based systems do. The best digital platforms pull new SDS versions straight from the source and alert you when something changes. That means no more chasing down suppliers or guessing what's changed.

Keeping SDS sheets up to date isn't just best practice — it's a legal requirement. Under Australia's model WHS Regulations[1], an SDS must be less than five years old and readily accessible to any worker who might be exposed. Failure to comply could result in penalties and puts workers at risk. ›

> MODERN DIGITAL TOOLS CAN NOW READ SDS DOCUMENTS USING AI SCRAPING KEY DATA LIKE HAZARDS, PPE, FIRST AID STEPS AND STORAGE NEEDS. THIS SAVES HOURS OF ADMIN WORK AND HELPS CREATE CLEAN, STRUCTURED RECORDS THAT ARE EASY TO READ AND COMPARE.

3. Let AI do the heavy lifting

Modern digital tools can now read SDS documents using AI — scraping key data like hazards, PPE, first aid steps and storage needs. This saves hours of admin work and helps create clean, structured records that are easy to read and compare. Even better, AI can help you flag risks or identify gaps in real time.

This means no more copying data by hand. No more typos that turn a minor warning into a major one. Just clear, consistent info, every time.

4. Link chemicals to hazards, risks and incidents

Chemical data in isolation is only part of the picture. By going digital, you can link each substance to related incidents, exposure reports, individual workers, risk assessments and audit findings. This paints a full view of your chemical risk across the business — not just what's stored where, but what it means for your people.

Need to show how a certain substance has been managed over time? Want to track trends in exposure or incidents? Need a better audit trail? A connected system makes that easy for both internal and external auditing.

5. Cut the admin (and the risk)

Manual registers, spreadsheets and paper trails take time to update and keep aligned across teams and sites. A cloud-based system means one source of truth, live for all users. No version mix-ups. No double entry. No back-and-forth between teams trying to work out which document is the right one.

The result? You'll reduce reliance on one person's memory, inbox or filing system — simultaneously reducing mental load, lowering business risk and ensuring business continuity.

Ask yourself

Are you really on top of chemical safety?

How confidently can you answer the below?

- ✓ Could you show someone exactly where all chemicals are stored, site by site?
- ✓ How quickly can your team access the right SDS in an emergency?
- ✓ Are you confident your SDSs are less than five years old and up to date?
- ✓ What happens when contractors bring their own chemicals onsite?
- ✓ Does your SDS process actually match the level of risk you carry?

If you're unsure of the above, digital chemical management might just be your answer.

6. Maintain consistency across your workplace

Got five sites? Ten? Fifty? A digital approach makes it easy to roll out chemical management at scale. Every site works off the same data and structure, while still being able to track local inventory and use. This makes audits, reporting and training far simpler — and helps drive a stronger safety culture from the ground up.

Uniformity is also key when it comes to meeting GHS[2] (Globally Harmonised System) labelling and classification rules — which are part of WHS law across all Australian jurisdictions.

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7. Make compliance less painful

Staying on top of chemical regulations, labelling rules and SDS expiry dates can be a full-time job. Digital systems help automate that burden. You can set alerts, track review dates and pull reports in minutes — not hours or days.

Need to prove compliance with WHS Regulation 344?[3] Or demonstrate that you've taken all *reasonably practicable* steps[4] to manage a chemical hazard? A digital trail gives you the evidence you need — fast.

That can make all the difference in the event of a regulator visit or an incident investigation.

The bottom line?

Digital chemical and SDS management isn't just a nice-to-have. It's a smarter, faster, safer way to run your workplace. You'll save time, reduce risk and get peace of mind that your business is on top of its legal duties — without drowning in paperwork.

So, if you're still doing things manually, now's the time to shift.

Quick check

Are you meeting your SDS duties?

According to WHS regulations in Australia, you must:

- ✓ Keep SDSs for all hazardous chemicals used or stored on site
- ✓ Ensure SDSs are less than 5 years old
- ✓ Make SDSs readily accessible to any worker who may be exposed
- ✓ Store chemicals according to GHS labelling requirements
- ✓ Review and update SDSs as needed

Source: Safe Work Australia

Fast facts

5 ways that paper-based chemical management can fail

- SDSs can go missing, expire or be misfiled
- Manual registers are time-consuming to update
- Staff rely on others to find the right data
- No link between chemical data and real-world risks
- Delays in emergencies due to inaccessible information

1. Model WHS Regulations https://www.safeworkaustralia.gov.au/doc/model-whs-regulations
2. Labelling of workplace hazardous chemicals: Code of Practice https://www.safeworkaustralia.gov.au/doc/model-code-practice-labelling-workplace-hazardous-chemicals
3. Managing risks of hazardous chemicals in the workplace: Code of Practice https://www.safeworkaustralia.gov.au/doc/model-code-practice-managing-risks-hazardous-chemicals-workplace
4. Interpretive Guideline — model Work Health and Safety Act — the meaning of 'reasonably practicable' https://www.safeworkaustralia.gov.au/doc/interpretive-guideline-model-work-health-and-safety-act-meaning-reasonably-practicable

CASE STUDY

Laser bird deterrent boosts tram depot safety

In Melbourne, pigeons and myna birds nesting in Yarra Trams' depots posed safety concerns and significant challenges for the site, with feathers and droppings compromising worker health and damaging sensitive infrastructure. To combat this, a trial was initiated in 2023, with two AVIX Autonomic Bird Deterrent Lasers installed. Developed by Bird Control Group in the Netherlands and supplied by Australian partner Bird Beam, the fully automated laser bird deterrent enabled Yarra Trams to boost safety and reduce bird roosting by 90%.

The system dramatically improved site conditions, the operating company, Keolis Downer, noted, enhancing both safety and operational efficiency. The system uses focused beams of light — these create optical illusions perceived by birds as physical threats, described by experts as resembling a "sparkling broomstick". The birds' heightened visual sensitivity is exploited by the illusions, which naturally deter them without harm.

"The AVIX system operates autonomously, day and night, and is fully programmable to target specific areas," said Keolis Downer, which was acquired by John Holland earlier this year. "Recognised by BirdLife Australia, it's not only effective but also environmentally responsible. This rollout is part of our broader commitment to innovation and sustainability in public transport — and it's helping to set a new global standard for urban infrastructure."

Yarra Trams, following the success of the trial, has expanded the installation to other depots, with early results indicating that AVIX lasers could serve as a model for urban transit systems globally; interest has already emerged from cities such as Dubai. For its ethical and environmentally responsible design, the technology is endorsed by both the World Wildlife Fund and BirdLife Australia.

Bird Beam
www.birdbeam.com.au

Uniform management platform

Get WorkGear allows businesses to streamline their entire uniform ordering process — from allocations and approvals to doorstep delivery — through one intuitive platform designed for simplicity and control. Designed to be effortless to navigate, even for team members with little to no experience using online systems, the platform aims to empower employees to order their own uniforms while giving managers full visibility and control over budgets and compliance.

Get WorkGear features include: smart allocations and order approvals, to set rules, track spending and control who can order what; order on demand, to reduce overstock and eliminate waste; streamlined ordering, to cut down admin time with a system that works for both staff and managers; worksite delivery, meaning uniforms go straight to where they're needed; and fully mobile responsive, so teams can manage orders on the go.

As uniform procurement continues to evolve, Get WorkGear's portal is designed to streamline supply chains, improve accuracy and help organisations look sharp from head to toe.

Get Work Gear
www.getworkgear.com

Gas filters range

Sundström offers a range of gas filters that can be interchangeably used with the Sundström SR100 half-mask and SR200 full-face respirator by simply fitting into the filter attachment. The SR510 particle filter can be snapped onto the front of the gas filter.

It is important to change the filter before it becomes saturated, and the filtering function ceases and the user breathes unfiltered contaminated air. Several factors affect the use time of a gas filter, including the filter type, filter size, ambient humidity and temperature, work intensity and pollutant concentration.

A type A filter consists of pure activated carbon, while all other types consist of carbon with various types of impregnations. Filters have varying abilities to absorb chemicals outside these chemical groups.

Gas filters are divided into three classes based on their capacity and test concentration: Class 1: 0.1% by volume = 1000 parts per million (ppm); Class 2: 0.5% by volume = 5000 ppm; and Class 3: 1.0% by volume = 10,000 ppm.

Sundström gas filters fall into two main categories: class 1 and 2. A class 2 filter has a higher absorption capacity than a class 1 filter, but at the expense of higher weight and greater breathing resistance.

The higher the ambient humidity, the shorter the useful life of the filter is. Impregnated carbon filters (B, E, K filters) do not have such sensitivity. The temperature also affects the useful life of the filter.

Increased work intensity increases the pulse and breathing rates. A larger volume of air flows through the filter during a given period, and the useful life of the filter is directly proportional to the air flow.

All these factors must be considered when selecting a gas filter and/or a combination filter.

Safety Equipment Australia Pty Ltd

www.sea.com.au

TECHNOLOGICAL LEVERS FOR HEAVY VEHICLE SAFETY

Technology is playing a pivotal role in mitigating heavy vehicle risks and enhancing safety. **LUKE OLSEN**, Managing Director APAC of Microlise, sets out some key existing and emerging technological safety levers.

Heavy vehicle crashes are on the rise, and it's not hard to see why. With more trucks on the road than ever before, driven by booming freight demand and pressure to meet tighter delivery windows, the risks are increasing. According to Transport for NSW, between 2019 and 2023 there were 4650 injuries from heavy truck crashes, averaging 930 injuries per year. This includes 1301 serious injuries, averaging 260 serious injuries per year.

The Australian Government's Safer Local Roads and Infrastructure Program is a welcome step forward, with $200 million committed annually to improving road conditions and rest stop infrastructure. Since applications opened in 2023, several projects have already received funding, including Western Sydney's first dedicated heavy vehicle rest area. But safer roads alone won't solve the problem.

To truly shift the dial on road safety, we need to pair infrastructure investment with smarter in-vehicle and planning technology. Telematics and real-time safety tools provide the visibility operators need to reduce risk, support their drivers and meet their Chain of Responsibility obligations. Smarter route planning, better data and reduced pressure on drivers — these are the levers that will help deliver safer outcomes across the industry.

Key challenges organisations face

Driver safety is a constant balancing act. Fatigue management is a major challenge, ensuring drivers remain compliant with fatigue regulations and aren't pushed to breach hours to meet tight SLAs. Distraction is another rising concern, with mobile phone use and even eating or drinking while driving posing serious risks — yet often going undetected without the right technology. Speed compliance also creates headaches, especially as frequent speeding infringements or mobile phone use can cost a driver their licence and worsen the existing driver shortage. In short, without visibility, businesses are flying blind on safety.

How technology is improving driver safety

Technology gives operators the visibility and tools to actively monitor and improve driving behaviour. We've seen fleets reduce overspeed

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TECHNOLOGY GIVES OPERATORS THE VISIBILITY AND TOOLS TO ACTIVELY MONITOR AND IMPROVE DRIVING BEHAVIOUR.

events significantly, while safety cameras and driver distraction alerts can instantly intervene to correct risky habits. In one case, deploying distraction-detection technology led to an 85% drop in distraction events, a direct link to reducing road incidents. When 65% of all road accidents involve distraction, the safety and bottom-line ROI of smart telematics is crystal clear.

Advanced in-cab driver distraction monitoring plays a huge role. Instant alerts help drivers self-correct in real time. Multi-camera systems (up to four-way views) not only improve situational awareness but are invaluable for post-incident investigation, often exonerating drivers. On top of that, safety modules that offer incident replay and analysis give operators full transparency on what happened and why.

Looking to the future

There are some exciting and innovative technologies set to further improve driver safety over the next 5–10 years. AI is changing the game. We're seeing a strong push across the industry, from OEMs to logistics providers, to embed AI-powered safety systems into vehicles. From predictive risk detection to autonomous intervention, this isn't just future-gazing — it's already shaping procurement decisions. The next wave includes semi-autonomous safety interventions, predictive distraction scoring, and real-time driver coaching powered by AI.

Another major area is predictive maintenance. With the right data, operators can identify early warning signs of vehicle faults before they become dangerous or lead to breakdowns. Braking system wear, tyre pressure anomalies and engine issues can all now be tracked and flagged in advance, reducing the risk of incidents caused by mechanical failure.

We're also seeing innovation in driver safety monitoring (like fatigue detection via biometrics), advanced ADAS integration with telematics platforms, and the rise of V2X (vehicle-to-everything) connectivity, where vehicles can communicate with infrastructure, other vehicles and even pedestrians to proactively avoid hazards. It's a fast-evolving space, but one that's set to make roads and our drivers significantly safer. While there is still a long way to go, technology is playing a pivotal role in mitigating these risks and enhancing the safety of all road users.

Real-world examples

There are some fantastic examples of how fleet managers have improved safety by adopting telematics and other transport technology solutions. One of Australia's largest retailers recently rolled out a Telematics & Driver Distraction detection solution across its fleet. During the initial rollout, distraction events dropped by more than 90%, creating a much safer environment for drivers and reducing the likelihood of incident-related downtime.

Meanwhile, another major Australian retailer saw a 99% reduction in mobile phone use and a 95% reduction in unbelted driving. Across other enterprise fleets, we've seen significant reductions in overspeeding and harsh braking, alongside fewer insurance claims and faster resolution of disputes, all thanks to better data and proactive safety management.

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A SHIFT IN MINDSET —THE CASE FOR DRUG AND ALCOHOL SELF-TESTING

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In safety-critical industries, drug and alcohol testing is often reactive — after an incident, complaint or suspicion. But by that point, the damage is often done. With a focus on machine operation, Touch Biotechnology CEO **MATTHEW SALIHI** makes a case for a shift to a more proactive, self-testing approach, which acknowledges that safety starts with the individual.

Substance use in the workplace is a growing threat, particularly in industries where one lapse in concentration can lead to serious injury or even death, such as in construction, transport, logistics and manufacturing, where machine operation, vehicle handling and physical coordination are all core to the job. And yet, one in nine Australian workers admit to being under the influence of illicit drugs at work in the past year.[1] ›

5 steps in a self-testing shift

1. Make self-testing easy and accessible

Ensure workers, especially those in high-risk roles, have private access to testing tools. This could be part of site induction kits, fatigue stations or wellness hubs.

2. Remove the fear factor

Reinforce that self-testing isn't about punishment. It's about protection — for the worker, their teammates and the business.

3. Support mental health alongside substance safety

Research shows workers under high psychological distress are nearly three times more likely to use illicit drugs.[2] Self-testing can be one part of a broader strategy that includes education, mental health support and open conversations.

4. Promote personal accountability as a strength

Recognise and celebrate when individuals take proactive steps to manage their own fitness for work. It signals maturity, not weakness.

5. Integrate it into safety systems, not as an add-on

Build self-testing into daily safety protocols, toolbox talks and fatigue management plans. Make it a visible part of the culture.

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For too long, the standard response has been reactive testing — after an incident, complaint or suspicion. But by that point, the damage is often done. The question safety leaders must ask now is: how do we stop incidents before they happen? The answer may lie not just in more testing, but in rethinking how, when and who initiates it.

Why self-testing belongs in safety-critical industries

Heavy machinery doesn't leave room for error. Whether it's operating a crane, reversing a semitrailer or using a power tool, impaired decision-making can have devastating consequences. And impairment isn't always obvious. Drugs and alcohol don't affect everyone the same way, and signs can be subtle or easily masked.

This is why self-testing — discreet, voluntary and accessible — is gaining recognition as a valuable safety measure. It empowers workers to assess their own readiness for duty in real time, especially in high-risk environments.

Unlike formal tests conducted by managers or health and safety reps, self-testing offers a private way to pause and reflect on whether the individual is in the right condition to do this job safely. That moment of reflection can be the difference between a safe shift and a serious incident.

Changing the conversation: from compliance to care

Traditional drug and alcohol testing policies tend to be punitive. They're triggered after a crash, a mistake or a tip-off. But this approach not only damages trust — it also misses early opportunities to intervene and support.

Self-testing shifts the power back to the individual. It gives people the chance to take action before anyone else needs to get involved. For workers under stress, coming off a big night, or unsure whether a medication could affect performance, self-testing provides a clear, judgement-free answer.

Importantly, it also respects privacy and dignity — key factors in industries where stigma and fear often prevent people from speaking up or seeking help.

Safety isn't just a policy — it's a mindset. When we normalise self-testing in the same way we do hard hats and harnesses, we reinforce the idea that safety starts with the individual. It becomes a shared value, not just a compliance box.

A moment to pause could prevent a lifetime of consequences

In industries built on risk management, we often talk about 'the golden moment' — the point at which a decision can change everything. Self-testing offers that golden moment before the work begins. It's a small step with potentially life-saving consequences.

As substance use patterns evolve, and as younger workers enter safety-critical industries, it's time to give individuals more agency. Because the best safety systems don't just react to danger. They give people the tools to prevent it.

In high-risk workplaces, self-testing isn't a luxury. It's a necessity. And when it's embraced as a normal part of daily operations, it can help create the kind of proactive safety culture every employer strives for.

1. Alcohol, drugs and workplace safety https://adf.org.au/insights/aod-workplace-safety
2. Mental health and use of alcohol, tobacco, e-cigarettes and other drugs https://www.aihw.gov.au/reports/mental-health/mental-health-alcohol-drugs

CASE STUDY

Construction materials company extends road safety program

Boral, Australia's largest vertically integrated construction materials company, has extended its partnership with Road Safety Education (RSE) Limited, to continue delivering potentially life-saving heavy vehicle and road safety education programs for students. RSE is behind Ryda, a road safety program that has been delivered to more than 735,000 young Australians nationally. Tens of thousands of students participate each year in the Ryda school programs, in which they learn the behaviours, habits and tools to stay safe on roads as both drivers and passengers.

Input was provided by Boral to develop a Ryda topic that sees students investigate the challenges faced by heavy vehicle drivers and how to predict any actions they may need to take to accommodate them. Understanding the risks and considerations when sharing the road with trucks is part of the workshops provided to students, with heavy vehicles available to be present at the workshops. A Boral driver is available to talk with participating students, with those participating also able to sit in the truck's cabin — to learn first-hand about the risk factors, such as truck blind spots and stopping distances.

"We are proud to be a longstanding partner of RSE and the Ryda program. Through the various programs we have helped to deliver, we have seen first-hand the engagement and benefits students have had in talking to Boral drivers and learning about the trucks and heavy vehicles and, more importantly, how they can make safe choices around them," Asphalt Executive General Manager Richard Pearson said. "As one of the largest suppliers of construction materials in Australia, we have a large heavy vehicle footprint — about 3500 heavy vehicles — and are on the road every day delivering to customers. We are committed to better educating the next generation of drivers and passengers with whom we share the road."

Boral
www.boral.com.au

COULD THIS TRIAL BRING US CLOSER TO A VIABLE SILICOSIS TREATMENT?

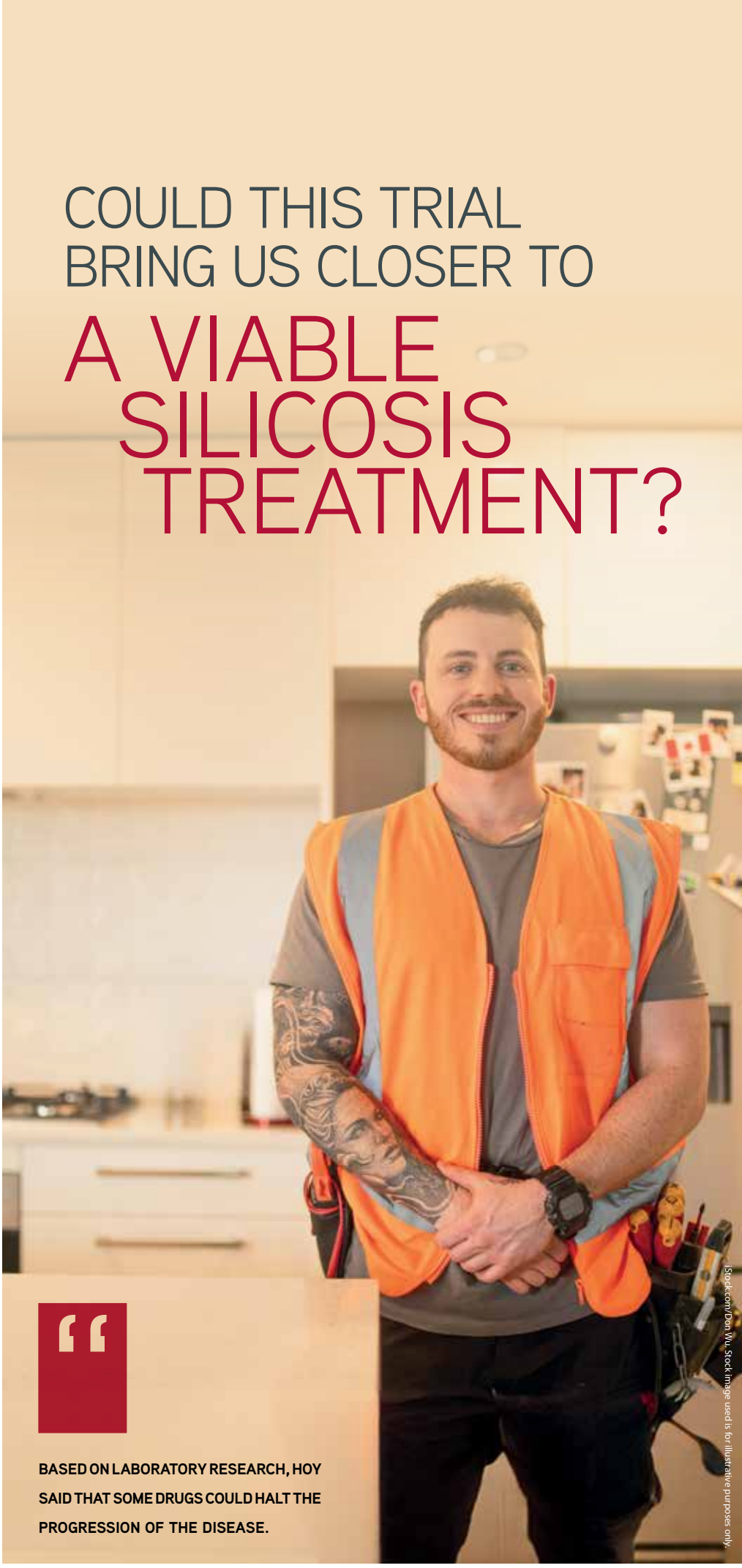
Cases of silicosis — a potentially fatal lung disease caused by inhaling dangerous silica fibres, predominantly from cutting artificial stone benchtops — started to drastically emerge from 2015, with hundreds of workers across Australia now with silicosis from heavy levels of silica exposure. Now, researchers from The Alfred believe patients are a step closer to a viable treatment for the disease, as they embark on a trial of a medication that has shown promise in laboratory settings.

"This is a preventable lung disease, but unfortunately young workers in their 20s, 30s and 40s have been diagnosed," Dr Ryan Hoy, respiratory and sleep disorders physician in The Alfred Occupational Respiratory Clinic, said. "Silicosis has been off the radar in many middle- and high-income countries for years, so there are no established treatments to halt or reverse it." Hoy added: "It is a really critical time for patients with silicosis to undertake research to identify treatment for this condition."

Based on laboratory research, Hoy said that some drugs could halt the progression of the disease. And now, thanks to a three-year research funding commitment from Zaparas Lawyers, Hoy and his team can embark on a trial. "The funding from Zaparas Lawyers is going to allow us to commence a world-first trial of a medication that has shown promise in the laboratory setting that could be applied to people with this condition," Hoy said.

On the funding commitment and the work of Hoy and The Alfred, Zaparas Lawyers Partner Yianni Zaparas said it has allowed the firm to "go beyond legal representation and actively invest in the health and safety of the communities we serve". "It reaffirms our dedication to advocating for improved workplace safety and also contributing to systemic changes," Zaparas said. "The fact that it is a world-first trial and us wanting to support and contribute to this important research is a driving factor.

"To contribute in any way to the improvement of the wellbeing of individuals suffering from silicosis potentially around the world is humbling. It's more humbling than the business of law." An immunosuppression treatment for silicosis is the next phase of the trial, and as to the potential impact of this work, Hoy said: "This study may be very beneficial for workers in Victoria but also around Australia and potentially has international implications as well."



BASED ON LABORATORY RESEARCH, HOY SAID THAT SOME DRUGS COULD HALT THE PROGRESSION OF THE DISEASE.

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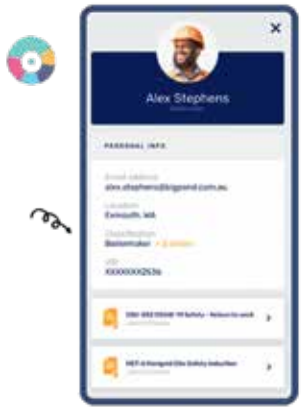
Digital workforce management system

MyPass is a digital workforce management system, designed to streamline safety and compliance in highly regulated industries.

It is designed to allow personnel to securely store, manage and share their credentials. It stores information such as validated licences, certifications, medical fit slips, vaccine status and background checks, with personnel able to share their credentials with organisations from any device.

Personnel can apply for roles, upload training and show completion for assigned roles, maintain their schedule and availability, and communicate with multiple organisations via chat. Each individual in MyPass is uniquely identified, their skills passport intended to be their 'single source of truth' across any industry or geography.



MyPass Global

www.mypassglobal.com

Australian Indigenous program glove range

The Ansell Australian Indigenous Program was launched in 2021 to support Aboriginal and Torres Strait Islander communities through partnerships that foster real opportunity. The program supports education and opportunity through glove sales and direct contributions, helping to create lasting impact for future generations.

Each glove in the range features original packaging artwork by Kristina Taylor, a proud Kamilaroi and Ngarrabul artist. The designs — themed around Land, Sea, Sky and Connection — link product experience to deeper cultural meaning, so that Indigenous culture is seen, respected and celebrated.

The glove range includes: HyFlex 11-840, a durable general-purpose glove designed for superior grip and abrasion resistance; HyFlex 11-561, a lightweight Cut Level C glove designed for dexterity and protection; HyFlex 11-571, an ultralight Cut Level D glove designed for high-risk, flexible tasks; and MICRO-TOUCH Blue Nitrile, a single-use glove designed for good fit and splash protection.

Ansell

www.ansell.com

MAKING EEHA INSPECTIONS SMARTER WITH MOBILE AND AI TOOLS

In environments where flammable gases, vapours or dust create potentially explosive atmospheres, Electrical Equipment in Hazardous Area inspections (EEHA) are essential for maintaining safety and compliance. These inspections fall under the requirements of standards such as IEC 60079-17/AS 60079.17 for inspection and maintenance of electrical installations in explosive atmospheres. The standards define both the scope and frequency of inspection types. Now, with the arrival of intrinsically safe mobile technology and sophisticated inspection platforms powered by AI, organisations can perform these inspections more efficiently and accurately while unlocking the benefits of true automation, writes **NAAMAN SHIBI**, Solution Consultant at Pervidi.

Understanding the three types of EEHA inspections

EEHA inspections are categorised into three main types, each with its own frequency and depth of examination:

1. Visual inspections

- Frequency: typically every 6 months, though high-risk zones may require monthly or quarterly intervals.
- Scope: detects visible faults without physical contact with the equipment.
- Examples: missing bolts, damaged enclosures, loose labels or signs, corrosion.

2. Close inspections

- Frequency: generally performed every 1 to 2 years.
- Scope: requires physical access and may involve opening covers or removing barriers without dismantling equipment.
- Examples: inspecting inside terminal boxes, verifying cable glands, checking internal seals.

3. Detailed inspections

- Frequency: usually conducted every 3 to 5 years, based on a documented risk assessment.
- Scope: a comprehensive examination, potentially including dismantling to inspect internal components.
- Examples: verifying internal wiring, inspecting insulation, checking conformance to original certification.

It's crucial to recognise that these frequencies are not static. Frequencies must be adjusted based on the zone classification, environmental conditions, equipment type and inspection history. A risk-based approach is always recommended.

Before the inspection: automating scheduling and preparation

Inspection planning must account for the frequency, scope and risk profile of each asset. Automation ensures that the correct type of inspection is scheduled at the appropriate interval for each equipment item.

Modern inspection management systems offer a suite of features to streamline this process, including:

- Automated scheduling: intelligent assignment of visual, close or detailed inspections based on pre-defined compliance calendars.
- Inspector qualification management: verification of inspector certifications to align personnel expertise with the complexity of the assigned tasks.
- Seamless system integration: Connectivity with asset registers, enterprise resource planning (ERP) systems and permit-to-work workflows.
- Intelligent checklists: pre-populated inspection forms that are dynamically tailored to the specific inspection type and equipment category.

This approach improves accuracy and ensures that all tasks are aligned with regulatory obligations and site-specific risk assessments.

During the inspection: performing work with intrinsically safe devices

Certified intrinsically safe mobile devices make it possible to perform inspections within hazardous areas without compromising safety. These devices are designed to prevent ignition, making them suitable for Zones 0, 1 and 2.

Visual inspections benefit from:

- Quick photo capture with annotation capabilities for clear documentation.
- Efficient recording of voice notes for immediate context.
- Intuitive smart forms that guide inspectors through comprehensive external checks.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Close inspections use:

- Step-by-step digital checklists prompting inspection of internal components.
- Instant access to historical records and schematic diagrams directly in the field.
- Field validation rules that minimise the risk of overlooked steps.

Detailed inspections require:

- Access to full inspection history and manufacturer specifications.
- High-resolution imagery and voice-to-text features for documenting findings.

All inspections, regardless of type, are captured digitally and date/time-stamped, creating reliable and auditable records.

The AI advantage: injecting intelligence into inspections

AI now plays an important role in supporting hazardous area inspections. Integrated directly into the inspection platform, organisations can unlock deeper insights and make more informed decisions with greater speed.

Key AI-driven capabilities include:

- Intelligent image analysis — AI automatically analyses captured images to detect anomalies such as corrosion, cracks or improper terminations. This helps identify issues that might be missed during a manual, fast-paced inspection.
- Voice tag transcription and summarisation — inspectors can record verbal notes during inspections. AI converts these into structured text, and summarises key points and recommendations for inclusion in reports or corrective actions.
- Comparison and trend analysis — AI compares current inspection results against historical data to highlight deviations, recurring issues or potential risks. This helps trigger predictive maintenance activities and supports audit readiness.
- Automatic severity classification — AI can prioritise issues based on predefined criteria, reducing subjectivity and helping teams act on critical faults without delay.

By embedding AI into the inspection workflow, organisations can gain deeper insight into equipment performance and reduce the time between issue identification and effective resolution.

EXPLOITATION RIFE AMONG MIGRANT MEAT WORKERS — REPORT

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The experiences of migrant meat industry workers have been highlighted in research out this year, which paints a grim picture of overall working conditions.

The RMIT University research focuses on Pacific Island workers in Australia's meat industry, many of whom reported feelings of being trapped and exploited. The report — 'Meat the reality: unpacking the exploitation of PALM scheme workers in Australia's meat industry' — calls for further improvements to address worker exploitation in the Pacific Australia Labour Mobility (PALM) scheme, beyond changes made in 2024. The Australian Government scheme provides foreign workers with temporary visas to work in meatworks and other industries with labour shortages.

How was the study conducted?

As well as providing a detailed legal critique and recommendations for reform, the report reveals personal experiences of five PALM scheme workers who each took photographs to represent their daily lives. The researchers used these photographs as prompts for in-depth discussions with the participants.

Shelley Marshall from RMIT's Business and Human Rights Centre (BHRIGHT) said the photographs and interviews revolved around themes of darkness, injustice and feelings of being trapped. "The participants in our study were sent to isolated rural towns, far from familiar faces, and placed in shared housing with strangers," Marshall said. "The photos hauntingly depict how they rarely see daylight due to physically demanding shifts, which are often extended with overtime, leading to an oppressive sense that their lives are consumed entirely by work.

"At work, these workers are often burdened with lifting heavier meat — a demand fuelled by racial stereotypes about their strength — yet earn less than colleagues on other visa schemes. Outside work, they are stripped of the full tenancy rights enjoyed by most Australians and are forced to endure high rents that are automatically deducted from their wages," Marshall said.

Study co-author Ema Moolchand said these challenges were compounded by a visa condition requiring the employer's permission for a worker to quit and seek work elsewhere. "Dependence on employers — even if they are clearly bad bosses — remains a key source of feelings of being trapped and unable to do anything about poor conditions, especially when workers face racial stereotypes or restricted freedom that further limit their ability to act," Moolchand said.

What are the recommendations?

The researchers are calling for more to be done to improve conditions for PALM workers, with those in the study saying they'd seen little improvement following changes made by the government in 2024. The report found while an attaché from each country had been appointed to support and represent workers, those surveyed had not met them and did not know who they were. Participants also alleged illegal deductions were widespread.

"As the first empirical study since important changes to the PALM scheme, this report highlights the need for a completely new approach to the scheme that genuinely prioritises worker voices and ensures fair, safe and dignified working conditions," Moolchand said.

Australian Council of Trade Unions President Michele O'Neil said the findings align with the experience of unions that represent PALM workers, showing these challenges to be systemic problems rather than isolated incidents. "This report adds a human voice to what we already know are significant and ongoing issues with a scheme that ties PALM workers to their employer; the lack of mobility for workers to change employers poses a clear modern slavery risk," O'Neil said.

"Among the changes we are calling for, mobility for these workers is paramount, as it would mean they can move to another approved employer if they need to leave a bad boss, unsafe conditions or harassment. This would mean employers could no longer treat PALM workers as bonded labourers." O'Neil also said a better scheme would ban employers who do the wrong thing.

Marshall acknowledged that the photovoice methodology used to share stories of the five participants in the study did not claim to be a representative survey sample for all PALM scheme workers. "This methodology is one that's useful to help us understand the experiences of people who live in a very different situation from our own in detail. It is more a deep dive than a representative sample, that aids more comprehensive legal analysis," Marshall said.

"It's important when discussing the well-documented issues with this scheme that voices and experiences of those living it are part of that debate."

CASE STUDY

Traffic management training review proves a winning formula

In South Australia, Yorke Peninsula Council's Temporary Traffic Management Harmonisation project has received the Local Government Association Workers Compensation Scheme's WHS Best Practice Regional Award. The project followed the council's comprehensive review of its traffic management training in response to national changes introduced by AustRoads. The council restructured its traffic management training into three targeted courses covering six units of competency — previously, it had been delivered as one course. A smarter, streamlined approach that improved safety outcomes while reducing unnecessary training was the result.

Close council consultation with managers and supervisors identified which roles required certification, leading to the removal of redundant training — for roles such as weed spray operators and mechanics — and a more focused approach for others. Traffic Controller training was only completed by staff needing stop/slow skills, while most were trained as Traffic Management Implementers, being responsible for setting up and packing down work zones. As part of the project, staff recorded practical tasks onsite and submitted footage for review, which avoided the need for assessors to travel long distances.

Bobbi Pertini, Yorke Peninsula Council's Manager People, Culture and Safety, said the project reflected the council's practical and people-focused approach to safety. "We wanted to do more than just meet compliance," Pertini said. "This project ensures our people receive training that's relevant to their roles, without unnecessary time and cost burdens.

"It's a smarter way of working — and a safer one."

For its phased rollout, employees with expiring certifications were prioritised, with onsite training delivered in partnership with CivilEdge.

Yorke Peninsula Council
yorke.sa.gov.au

High-visibility, cut-resistant glove

Driven by the demand for visibility and uncompromising cut protection, Graphex has developed the Quantum Lumina. More than just a high-visibility glove, Lumina combines 18-gauge dexterity with Cut Level F protection, to ensure safety never goes unseen. With its hi-vis liner, Quantum Lumina is engineered to make PPE compliance instantaneous at a glance, so the jobsite knows it's protected.

Crafted with advanced yarn technology, Lumina integrates reflective visibility with cut-resistant fibres, being designed to perform in low-light conditions without sacrificing comfort or precision. It's engineered for those who work at night, in tunnels or on unpredictable sites where visibility is mission-critical.

Graphex stands on a foundation of trust and testing, certified by BSI Group and reinforced through regular third-party audits. These measures offer mechanical claim validation.

Private Brands Pty Ltd
www.privatebrands.com.au

Exit signs

Smarterlite environmental exit signs are designed to offer an eco-friendly and cost-effective solution that bolsters safety while reducing emissions and costs. The signage is battery-free with no Wi-Fi or data connectivity and available in pure photoluminescent (Apollo Exit Sign) or hybrid photoluminescent and LED technology (Hyperion Hybrid Exit Sign).

The Apollo Exit Sign provides clear and visible exit guidance and has no electrical components or batteries, being designed as an option in commercial and industrial applications where a hardwearing sign is required. The Hyperion Hybrid Exit Sign features long-life high-efficiency LEDs to ensure the photoluminescence is always fully charged, even if it's in a poorly lit space.

Smarterlite Pty Ltd
smarterlite.com

FROM GENERAL TO SPECIALISED CHOOSING THE RIGHT AI FOR EHS

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AI is no longer a futuristic buzzword — it's increasingly integrated into our professional lives. For EHS leaders, AI offers a compelling promise: to revolutionise risk management, streamline compliance and, ultimately, save lives. But as AI tools become more accessible, one critical distinction is often overlooked — not all AI is created equal. As **EGOR NAZAROV**, Senior Head of Marketing at Soter Analytics, explains, understanding the difference between general-purpose AI models and specialised, industry-specific 'vertical AI agents' is essential for EHS professionals aiming to make informed, strategic decisions.

The current AI landscape is dominated by powerful 'large language models' (LLMs) like ChatGPT and Gemini. These general-purpose models are incredibly versatile, capable of drafting emails, summarising documents and even generating creative content. An EHS manager might use an LLM to outline a toolbox talk or summarise a lengthy regulatory update.

While helpful, these applications only scratch the surface of what AI can achieve when tailored to the unique complexities of the EHS domain. The true transformative power lies in leveraging vertical AI agents — systems specifically designed, trained and optimised to address the unique challenges, workflows and data of EHS.

Defining the divide: general-purpose vs industry-specific AI

To appreciate the value of vertical AI, it's important to distinguish between two approaches:

General AI models

These foundational LLMs are akin to highly educated generalists, trained on vast, diverse datasets across countless domains. Their strength lies in broad versatility, not deep specialisation. For EHS use cases, they often require users to perform extensive prompt engineering or custom fine-tuning to produce meaningful outputs.

Vertical AI agents

Purpose-built for industries like EHS, these models follow a 'narrow and deep' design philosophy. They are trained on curated, high-quality datasets — regulatory texts, industry standards, safety data sheets (SDSs) and historical incident records, allowing them to understand EHS-specific language, context and logic with much greater accuracy.

General AI vs vertical AI for EHS: a comparison

The differences between these AI approaches become even clearer when we examine their core attributes in the context of these four EHS challenges:

1. Precision in a high-stakes field (scope and purpose)

In EHS, precision isn't optional. General models can provide basic overviews but require highly specific prompting to interpret scenarios like confined space entry. Vertical AI, on the other hand, is built with these specific workflows in mind, delivering targeted, context-aware support out of the box.

2. The power of relevant data (training data)

General models are trained on internet-scale datasets that may lack the rigour, accuracy and domain specificity required for EHS. Vertical AI is fine-tuned on authoritative, industry-specific data, enabling it to 'speak EHS' natively and accurately.

3. Expertise that understands nuance (knowledge and expertise)

A general LLM might correctly define the 'hierarchy of controls' but struggle to apply it in context, such as addressing an ergonomic hazard. In contrast, a vertical AI trained on ergonomic assessments can analyse task data and suggest appropriate controls, grounded in regulatory and best-practice knowledge.

4. Seamless integration vs heavy lifting (customisation and implementation)

General AI models typically require significant customisation and engineering to align with specific EHS workflows — like coding a system to classify near-miss reports using your internal risk matrix. Vertical AI solutions often come with built-in connectors, compatibility with popular EHS software and pre-configured understanding of EHS data structures, reducing implementation time and complexity.

Why this matters

Distinguishing between general and vertical AI is more than an academic exercise — it's a strategic imperative. In high-risk, compliance-driven fields like EHS, the benefits of vertical AI extend far beyond automation. These systems offer predictive insights, enhance regulatory alignment, and empower safety teams to prevent incidents proactively rather than reactively.

While general AI tools offer broad utility and convenience, the future of EHS transformation lies in vertical AI — deeply knowledgeable, workflow-aware and purpose-built for the environments they serve. By adopting vertical AI, organisations can move from simply managing safety data to actively shaping safer, more compliant workplaces.

CASE STUDY

Free psychosocial risks course aims to protect SA workers

Jointly produced by SafeWork SA and ReturnToWorkSA and delivered by specialist training provider GPEx, the Managing Psychosocial Hazards and Risks in the Workplace training course is free and designed to help businesses understand how to protect workers from psychosocial risks in the workplace.

Designed to help equip businesses with the knowledge and practical skills needed to prevent harm associated with psychosocial risks in the workplace, it takes 1–2 hours to complete the course.

In the course, participants identify psychosocial hazards like high job demands, lack of support, poor communication and workplace bullying; assess and control risks with a mix of preventative and reactive measures where possible; and monitor and review the effectiveness of the control measures to ensure psychosocial risks remain well-managed over time.

Practical psychosocial case studies are also included — allowing participants to unpack realistic scenarios from the construction, healthcare and retail industries — with participants given access to a suite of resources and a certificate of completion at the end of the course.

It has always been an implicit requirement under the Work Health and Safety Act and the Work Health and Safety Regulations 2012 (SA) for businesses to do what is reasonably practicable to either eliminate, or if not practicable, to minimise, exposure to psychosocial hazards or minimise the impact of exposure.

Now — following amendments to the regulations that became effective in South Australia in December 2023 — the positive duty imposed on businesses is very clear; these new regulations that define psychosocial hazard and risk and set out requirements for how to protect workers from them through a consultative risk management approach.

The need to increase awareness and understanding of the significant impact of work-related psychosocial hazards on workers' health and safety largely drove the introduction of these regulations. More information on the new course is available at gpex.com.au/course/managing-psychosocial-hazards-and-risks-in-the-workplace. SA information on psychosocial hazards is also available at www.safework.sa.gov.au/workplaces/psychosocial-hazards.

SafeWork SA
safework.sa.gov.au

Safety laser scanner

The RSL 200 from Leuze is a compact device designed to reliably safeguard machines, systems, automated guided vehicles and autonomous mobile robots. It offers an operating range of 3 m and a 275° scanning angle. For a greater operating range of up to 8.25 m, users can choose the RSL 400.

The configurable and switchable protective and warning fields of the RSL 200 enable flexible protection. They allow the monitored areas to be optimally adapted to curved paths, different speeds and various load conditions. Omnidirectional vehicles can be safeguarded in all directions with the laser scanner: only two diagonally mounted devices are required due to the 275° scanning angle. With 32 switchable sets of protective and warning fields, the speed and direction of travel can be continuously adjusted.

Ease of servicing is supported, with the laser scanner able to be replaced with just four screws, and no alignment necessary. The RSL 200 also contains a removable configuration memory, making it easy to transfer the configuration to the new device.

With the RSL 200 app users can access status and diagnostic data in real time via Bluetooth directly from their smartphone/tablet (Android and iOS), even if access to the device is restricted. A digital service file can be forwarded directly to Leuze Service if required. The app enables uninterrupted diagnostics as the protective fields do not need to be disabled.

Leuze electronic Pty Ltd
www.leuze.com.au

THE RISING COST OF EXTREME-TEMPERATURE INJURIES

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Researchers from Charles Darwin University (CDU), The University of Adelaide and Monash University have analysed more than 2.3 million workplace injury claims across Australia's capital cities — all except Canberra — to understand the threat of extreme temperatures in the workplace. The data covers a period between 2005 and 2018, and was linked with daily maximum wet bulb globe temperatures — a measure of heat stress in direct sunlight that can be applied both indoors and outdoors.

What they found across the 13-year study period is that 1.66% of all preventable occupational injuries and illnesses (OIIs) could be attributed to heat — accounting for close to 39,000 OIIs. Concerning OIIs associated with cold, the researchers noted that these injuries were more likely to be more severe or longer in duration, resulting in increased costs — despite a reduced frequency.

Professor Kerstin Zander.

The study marks the first time a national cost profile of both heat- and cold-attributable OIIs has been provided, with the researchers estimating that exposure to heat and cold is costing Australia's workers and employers $94 million a year — a figure projected to rise by more than 25% by 2050. The study's lead author, postdoctoral researcher Dr Matthew Borg from The University of Adelaide's Faculty of Health and Medical Sciences, described extreme temperatures as one of the most threatening health impacts of climate change.

"Under a high-emissions scenario, heat-related OIIs are projected to increase from 1.66% to 2.10% by 2050, posing major risks to worker safety and productivity," Borg said. "Understanding how temperature affects costs can help workplaces and public health agencies create cost-effective plans to prevent and manage temperature-related OIIs.

"Employers can protect workers by using heat safety measures such as setting work-to-rest ratios based on temperature and job demands, providing plenty of water and access to shade or air-conditioning, monitoring hydration, ensuring proper clothing, creating heat acclimatisation plans for new workers, and reducing heat generated in the workplace," Borg said.

Professor Kerstin Zander from CDU's Northern Institute, a co-author on the study, noted that more research was needed to determine the true extent of OIIs and their burden on the Australian economy. "OIIs of mild severity are less likely to be reported, potentially biasing the data to over-represent more severe OIIs and underestimating the true cost burden to Australian workers and employers," Zander explained.

"Future research on how temperature affects work-related health should look at both heat and cold," Zander added. "Since injuries and costs affect people of all ages, genders, industries and jobs, prevention efforts should target the whole workforce."

Findings from the study were published this year as an article — 'Anomalous temperatures increase occupational injuries, illnesses and associated cost burden in Australia' — in *Urban Climate*.

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IMARC 2025
SUPPLY CHAIN, COST AND PRODUCTIVITY IMPERATIVES LOOM LARGE

A volatile global economy is pushing miners to innovate, as demand for minerals and metals rises. At the International Mining and Resources Conference + Expo (IMARC), returning to ICC Sydney from 21–23 October 2025, industry leaders will focus on resilient supply chains, competitive costs and productivity-boosting innovations.

Organised by Beacon Events, IMARC 2025 will explore strategies for building robust supply networks, managing costs intelligently and forging global partnerships to deliver the minerals needed across energy, technology, transport and urban transformation sectors.

"The calibre of leaders and the depth of both industry and government representation mean that real solutions to the many challenges in front of decision-makers today can be found at IMARC," said Sherene Asnasyous, Event Director — Content & Partnerships of IMARC. "Our aim is to deliver practical, implementable strategies that drive measurable change."

Conference sessions will spotlight best practices in cost management and new technologies improving efficiency across exploration, mining, processing and transport. Safety remains central, with technology adoption discussed alongside risk management, change leadership and innovative mine management.

Senior representatives from BHP, Rio Tinto, Newmont, Vale, South32 and more will discuss topics including:

- Driving productivity and decarbonisation through collaboration, technology and innovation
- Balancing productivity and operational excellence with cost efficiency
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IMARC 2025 will not only spotlight the domestic industry but also provide international perspectives.

"As Australia's International Mining Week, IMARC 2025 is a vital platform for the global mining community to engage, collaborate and exchange best practices," said Anita Richards, Chief Operating Officer of Beacon Events. "With delegates from more than 120 countries, IMARC remains Australia's leading mining event for fostering strategic partnerships, enhancing industry collaboration, and advancing sustainability and investment credentials across the sector."

A new Mining Operators Series will provide site-based professionals with practical solutions and the opportunity to earn CPD points. BHP mine projects superintendent Ben Edwards sees its value:

"Conversations about what really happens on site and what is important to sites and operations are needed at large conferences like IMARC," Edwards said. "A conference like IMARC that can bring executives and company leaders together with onsite leaders and subject matter experts, hearing largely unfiltered information about what matters most, is very valuable."

Early bird registration is now open at imarcglobal.com.

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