

the monitor

Keeping all those with an interest in OHS informed of current developments in workplace health and safety nationally and internationally



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Editors: Sheryl Kelly and Allaine Coleman
Collaborator: Patrick Gilroy

President's report

Members and other readers, once again the Society has put together another interesting edition of the Monitor that I hope will be of professional use and of course an interesting read.

Allaine Coleman our Life member and Secretary has submitted her bio which outlines her diverse career in a variety of roles in OHS, OSH and Workers Compensation. Each edition of the monitor will feature a bio from one of the committee members with Dr KC Wan scheduled for the next edition.

With occupational mental health playing such a significant factor in the psychological hazards present in the workplace, the Society will continue to pay attention on this issue and wherever possible contribute with understanding and suggested control measures. I will be presenting at a Safety Institute of Australia (SIA) forum on the subject on May 30th at the ECU Mt Lawley.

One of our committee members, Sheryl Kelly is to undertake the Instructors Mental Health First Aid training course, which will enable her to facilitate courses to educate on how to assist an adult who may be experiencing a mental health crisis.

This edition covers the presentation provided by Fiona Donaldson on Resilience another new method of dealing with stress and anxiety in the workplace.

Our next presentation will be in August on the subject of Sick Building Syndrome and the mould in modern buildings in the Pilbara. Planning is well underway so keep an eye out for the flyer. We are then planning a site visit, to enable all members to observe how buildings can create a hazard to health if not properly designed, built, inspected, cleaned and ventilated.

At long last we have some business cards to hand out by the committee and interested members.



Dave Lampard
President.

Bio – Allaine Coleman



How did this all begin? I completed my Bachelor of Arts degree in 1985 and had just sold my business (a pizza place) mid 1988. I was not sure where my career might lead from there. I commenced

employment with the Bureau of Statistics to help pay the bills. I was tasked with compiling workplace incident statistics. This sparked my initial interest. I moved to WorkSafe WA (then the Dept of Occupational Health, Safety and Welfare) in January 1989. I had several positions at WorkSafe but finally decided that moving into the inspectorate would provide me with the most satisfaction. Here the value and impact of risk management and health and safety on people's lives was evident. During my time at WorkSafe WA I completed an Associate Diploma in Occupational Health and Safety. It was shortly after joining WorkSafe WA I became involved in the Society, first as a member, then a committee member. I was privileged to hold the position of President in the past.

I left WorkSafe WA and worked for an insurance company as a Risk Management Consultant before moving into industry taking up health and safety management roles. I eventually came back to the insurance industry, as a Safety and Risk Consultant, as I felt this provided me with the most rewarding and diverse occupation. Working with small to medium and large companies allowed me to develop more skills and knowledge in a variety of industries. This role presented me with the opportunity to help employers implement systems to better manage health and safety which lead to reduced workers' compensation premiums. The role was continually challenging.

I have continued my association with the Society throughout the years and was involved with Pat Gilroy in resurrecting the Society some years ago.

I have recently retired but am keeping my hand in with maintaining my role as Secretary for the Society.

I was recently awarded the inaugural life time membership award for my contributions to the Society over the years. I deeply appreciate the recognition that this award instils.



Membership renewal due

If your name does not appear on the 2019 Financial Members list, at the back of the Monitor, our records indicate you are not a current financial member.

If you have paid and your name is not on the list, contact the Society immediately.

If you have not paid, it would be appreciated if you could do so at your earliest convenience. We rely on your membership fees to allow the Society to continue to provide you with the Monitor, events and workshops.

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IN EVENTS

Presentation by Fiona Donaldson

Resilience programs in emergency responder and military agencies



Fiona is a 2016 Churchill Fellow. Her paper investigated the preventative resilience and positive psychology programs that contribute to wellbeing to determine their effectiveness and ability to be utilised by emergency services personnel. Her paper also evaluated programs that focus on keeping people well and reducing stigma around normal reactions to the abnormal events that emergency services personnel are exposed to.

The presentation provided information of the findings of her report including a systematic approach to building resilience with specific attention on cultural and leadership issues.



At the event the awards for the Safety First Safety Foremost awards were presented by Professor Janis Jansz.

The Award winner was Ting Ni, 1st Runner up was Ben Banyai and 2nd Runner up, Daniel Smith.



Antony Green, a new member was presented with his membership Certificate and a badge.



IN SAFETY



Beware young workers copying dangerous behaviours

Young workers emulate their co-workers' and managers' risk-taking behaviours and tackling the high risk of injury among them requires raising organisational safety and cultural standards, according to Nordic researchers.

Young people's physical, cognitive and psychosocial immaturity and low level of work experience make them especially prone to workplace accidents and illnesses, says the research team led by Therese Hanvold from Norway's National Institute of Occupational Health.

However, it is easier and more effective to implement interventions targeting organisational factors like safety norms, climate and culture to reduce these risks than tackling the characteristics of being young.

"Co-worker risk-taking is a relatively strong predictor of youths' risk-taking orientation at work"

"It is crucial to have focus on the OSH culture in the workplaces where young workers enter into because the espoused and enacted behaviour of leaders and workers in everyday settings set the norm that young workers strive for."

The researchers reviewed 54 journal articles and found workers aged 15 to 29 experienced higher rates of accidents involving falls, cuts, contusions, crushing incidents and injuries to the fingers, hands and eyes than older workers.

They found cumulative exposures to chemicals, psychosocial factors like high demands and low support, heavy physical workloads and awkward postures are the main contributors to work-related illnesses among young workers, causing skin conditions, low back pain and mental health conditions.

They say this finding aligned with an earlier literature review that found a perception of "work overload" and feeling rushed were associated with work accidents among young workers.

"Young workers may also be 'skill overemployed', which means that the work can be too demanding as young workers may not yet have the necessary physical and cognitive maturity nor sufficient professional skills".

"This emphasises the importance of OSH initiatives targeting the workplace where the young workers enter."

They warn that young workers are a varied group and their vulnerabilities to safety risks are highly contextual, which needs to be considered when targeting risk factors or initiating interventions.

Any focus on the group should be nuanced, and take into consideration differences in physical and psychological maturity, experience, status at work, previous work exposures and affiliation to the workplace.

The review found safety interventions involving structural changes to the physical or organisational environment and integrated safety measures were the most effective for reducing accidents at work.

[Occupational Safety and Health Among Young Workers in the Nordic Countries: A Systematic Literature Review](#). Therese N.Hanvold, et al, Norway, *Safety and Health at Work*, online first December 2018 doi: 10.1016/j.shaw.2018.12.003.

Source OHS Alert 21 January 2019

New Australian Standard for workplace drug tests released

A revised Australian and New Zealand Standard for testing saliva for drugs will improve the reliability of results and enhance workplace safety, according to Standards Australia.

[AS/NZS 4760:2019, Procedure for specimen collection and the detection and quantification of drugs in oral fluid](#) has been developed with the support of device manufacturers, testing laboratories, trade unions, aviation agencies and other industry bodies, and highlights the latest methods for detecting drugs in saliva.

New clothing rules added to Australian Standard

AS/NZS 4399:2017, Sun protective clothing – Evaluation and classification includes a new requirement specifying the minimum amount of body surface that must be covered before a clothing product can make an ultraviolet protection factor (UPF) claim.

Workplace bullying creates vicious cycle of misconduct

Workplace bullying not only harms victims' health but encourages them to engage in "deviant" behaviour at work in order to cope, UK and Italian researchers have found.

In a survey of 1,019 workers, they found those subjected to high levels of bullying reported the most health complaints and acts of "counterproductive work behaviour", like purposely doing work incorrectly, damaging or stealing work property, abusing co-workers and clients and taking unnecessary sick leave.

The researchers, led by the University of East Anglia, say their study is the first to highlight the pivotal roles that negative emotions, emotional dysregulation and compensatory coping behaviour play in determining how workers will function when

they are exposed to high levels of workplace bullying.

They found severely bullied workers showed the highest level of negative emotions and moral disengagement – rationalising negative actions and absolving themselves of responsibility for the consequences. They also showed difficulty managing their problems and emotions and engaged in compensative behaviours, like drinking more alcohol and taking more risks more often, they found.

According to the researchers, for some bullying victims, their lack of self-control over damaging behaviours is an "externalisation" of their distress and state of helplessness. Despite research on workplace bullying recognising the relevance of emotions when dealing with workplace aggression, WHS guidelines often don't focus on this specific factor.

Workplace programs that tackle bullying should include interventions that help workers develop emotional regulation strategies for dealing with health, bullying and counterproductive work behaviours. It is also "essential" to promote behaviour regulation strategies to reduce justification mechanisms like moral disengagement and compensating behaviour.

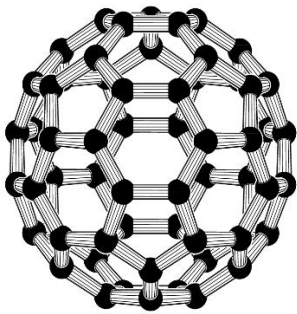
Bullying behaviour, like repeated insults or physical abuse, represents one of the major occupational stressors for workers and compromises their development and goals within an organisation.

Other examples of workplace bullying include: unreasonable actions directed toward a worker's workload and work processes, like removing their responsibilities or attacking their status; and excluding, isolating or physically abusing a worker.

[Phenomenological configurations of workplace bullying: A cluster approach](#). Marinella Pacielloa and Roberta Fida, et al, Italy, *Personality and Individual Differences*, May 2019 doi: 10.1016/j.paid.2019.05.001.

Source – OHS Alert 21 May 2019

Nano risks extend beyond manufacturing processes



The growing evidence from animal studies that nanomaterials can be harmful to health should compel employers to eliminate or reduce exposure to the tiny particles

through the hierarchy of controls – immediately, according to special guidance from the American College of Occupational and Environmental Medicine (ACOEM).

ACOEM also warns that workplace exposure to engineered nanomaterials is unlikely to be confined to initial manufacturing processes, and "might also occur during maintenance or modification activities, such as cutting, sanding, or drilling, which disrupt finished products or components fabricated with nanomaterials".

"At the present time, safety data sheets and other safety information that accompanies finished products may not reliably indicate the presence of engineered nanomaterials or their potential release during typical or atypical activities that may disturb or disrupt the product," ACOEM says in the [guidance document](#), published by the *Journal of Occupational and Environmental Medicine*.

"ACOEM supports the proper labelling of products containing nanomaterials, especially if reasonably anticipated use, maintenance, or handling might result in potential nanoparticle exposure," it says.

"For a distributor or seller of a finished product or part, that will require careful tracking of nanomaterial content in all precursor materials and components."

Concerning evidence

Engineered nanomaterials (manufactured particles with a size of between one and 100

nanometres) are used in a rapidly increasing number of manufacturing processes, products (like insulation, filters, lubricants, paints and tyres) and medical applications.

ACOEM says that while no definite links between exposure to engineered or synthesised nanomaterials and adverse health effects have been reported in humans, there is "accumulating evidence from animal studies that exposure to some nanomaterials is harmful".

Some studies have shown that mice developed pulmonary inflammation and fibrosis after exposure to single-wall carbon nanotubes, while some multi-walled carbon nanotubes have been linked to mesothelioma in mice, leading to the International Agency for Research on Cancer classifying them as "possibly carcinogenic to humans", it says.

Other animal studies have found that nanomaterials can move through the body, such as from the nasal cavity to the brain via the olfactory nerve tract, it adds.

These findings don't necessarily apply to humans exposed in occupational settings, but there is one reported case of a worker suffering symptoms of allergic rhinitis and nickel sensitisation (with reactions to nickel earrings and a belt buckle) after uncontrolled exposure to nickel nanoparticle powder, ACOEM says.

Further, it's possible that the well-established link between ultrafine particles (in diesel emissions, for example) and declines in pulmonary function in humans points to the potential adverse health effects from engineered nanoparticles, it says.

Protecting workers

Given the uncertainty around these issues, the "prevention or reduction of exposure, using the hierarchy of controls, seems prudent", the guidance statement says.

"The potential for exposure to nanoparticles, influenced by the quantity used and the form in which the nanoparticles occur, should be considered in designing appropriate controls," it says.

"Engineering controls, such as source enclosure, local exhaust ventilation, and high-efficiency particulate air filtration, should substantially reduce or completely eliminate exposures.

"Robust controls that prevent exposures may represent the most prudent response at this time to the lack of information on health effects and dose-response. Employee training in safe work practices is also important."

ACOEM notes that employers should only resort to providing respirators if it isn't feasible to implement engineering controls that *eliminate* exposure to nanomaterials.

[ACOEM Guidance Statement: Nanotechnology and Health](#). Dr Michael Fischmann, et al, US, *Journal of Occupational and Environmental Medicine*, online first January 2019, doi: 10.1097/JOM.0000000000001548.

Source OHS Alert 25 January 2019



Growing Evidence That Exposure to Some Nanomaterials is Harmful

What are nanomaterials?

Nanomaterials are, as the name suggests, tiny. Invisible to the naked eye, and at less than a millionth of a metre in size, their physical and chemical make-up results in materials with less weight, greater reactivity, increased strength, and improved electrical characteristics.

They are increasingly used in industries such as electronics, aerospace, construction, medical technology, and automotive – with no sign of slowing down. As a global industry, nanotechnology is tipped to value US \$174 billion by 2025.

Health effects

ACOEM says that while there is currently no definite links between exposure to nanomaterials and adverse health conditions in humans, there is now “accumulating evidence from animal studies that exposure to some nanomaterials is harmful”.

One [European study](#), found that inhaled nanoparticles in the body could create lung inflammation and heart problems. It also found nanoparticles could potentially move from the lungs to other organs such as the brain, the liver, the spleen, and possibly the foetus in pregnant women.

What can employers do?

Because nanotechnology is a recent development, the health and safety effects of exposure to nanomaterials, and what levels of exposure may be acceptable, are subjects of ongoing research.

The researchers say that given the uncertainty surrounding human health effects, “prevention or reduction of exposure, using the hierarchy of controls, seems prudent”.

“Engineering controls, such as source enclosure, local exhaust ventilation, and high-efficiency particulate air (HEPA) filtration, should substantially reduce or completely eliminate exposures.”

“Robust controls that prevent exposures may represent the most prudent response at this time to the lack of information on health effects and dose-response. Employee training in safe work practices is also important.”

By [Jared Butt](#) 31 January 2019



PLAN



MONITOR



PROTECT



CONTROL

Ultra Violet Radiation (UVR) effects everyone

UVR effects **everyone**, it comes from the sun as well as artificial lighting such as welding or specialised lights used in hospitals and laboratories.

It's not just related to how hot it is, you can still get burnt on cool or cloudy days. UVR levels are high enough to damage unprotected skin which can result in skin cancer (UV levels of 3 and above). Cancer Council research says that skin cancer accounts for around 80% of all newly diagnosed cancers*

You can be affected by UVR even if you are in a car or home.

There are many different types of glass. Each provides very different levels of sun protection, for example:

- **House** window glass provides only moderate protection against UVR.
- **Office** building glass has a UPF of 50+ which means it provides excellent protection.
- **Vehicle** glass UVR levels vary. But it's important to remember that a person sitting in a car can still receive significant exposure to UVR.

How to protect yourself against UVR

Some tips for protecting yourself include:

- **Engineering controls:**
 - Use shade cloth when working outdoors.
 - Put blinds or curtains down to block out sunlight.
- **Administrative controls**
 - Reschedule work so the hot tasks are performed during the cooler part of the day.
 - Provide extra rest breaks in a cool area.
 - Reduce the time spent doing hot tasks (e.g. job rotation).
- **Personal protective equipment and clothing:**
 - Wear hats and light clothing that still provide sun protection.

If you're an employer, download the [SunSmart Skin cancer and outdoor work guide](#) for more information

Where can I find more information?

BOM weather app

- Use the free [BOM weather app](#) to check the weather forecast and UVR levels.

SunSmart app

- Use the free [SunSmart app](#) to find out when you should use sun protection and to check UVR levels.



Silica drives black lung resurgence, monitoring urged

A new study looking at the resurgence of work disease black lung suggests higher exposure to silica dust is a key factor behind the problem and identifies a range of control measures.

Researchers from the US National Institute of Occupational Safety and Health's Respiratory Health Division analysed the chest radiographs of 106,506 working underground coal miners in central Appalachia from 1980 to 2018.

They found the proportion of radiographs with r-type small opacities increased each decade, which indicates that exposure to respirable crystalline silica was a dominant factor in the recent "unprecedented" spike in the deadly lung disease, also known as coal workers' pneumoconiosis.

The US researchers note that r-type opacities have long been associated with silicosis, a very similar disease to black lung.

The researchers raise concerns about the improper use of dust monitoring and control equipment, in particular for miners involved in thin-seam coal mining which involves cutting large amounts of silica-bearing rock.

They urge employers to review their current practices due to the high toxicity of silica compared to coal dust, and its association with increased pulmonary inflammation.

The researchers say traditional methods of monitoring exposure to silica involve processes that don't provide results for days or weeks, but new monitoring equipment can provide virtually live measurement of the hazard.

In many cases, superior monitoring options, as well as secondary preventions like moving at-risk workers to less dusty positions, are being "underutilised".

[Continued increase in prevalence of r-type opacities among underground coal miners in the USA](#). Noemi B Hall, et al, US, *Occupational and Environmental Medicine*, April 2019, doi: 10.1136/oemed-2019-105691. Source and full article - OHS Alert 8 May 2019

Safe workplace dust limits to be slashed

Safe Work Australia has recommended significantly reducing the workplace exposure limits for silica and coal dust to below those recently imposed by unions and in Queensland, with the current standards exposing workers to the risk of irreversible lung damage.

In the draft documents, SWA says the workplace exposure standard for respirable coal dust (with less than 5% quartz) should be cut from a time-weighted average (TWA) of 3mg per cubic metre over eight hours to as low as 0.4mg per cubic metre for anthracite coal, which has a very high carbon content, and to 0.9mg per cubic metre for bituminous and lignite coal, to prevent coal workers' pneumoconiosis (CWP, or black lung), progressive massive fibrosis (PMF) and chronic obstructive pulmonary disease.

It is well established that exposure to an average of 2mg per cubic metre over eight hours increases the risk of reduced lung function.

Meanwhile, SWA recommends that the workplace exposure standard for respirable crystalline silica be cut from a TWA of 0.1mg per cubic metre to 0.02mg, to prevent fibrosis and silicosis, and, consequently, minimise the risk of lung cancer.

It adds that while the mechanism for developing lung cancer due to exposure to silica dust is not well defined, there is consistent evidence from human studies that the risk of the disease increases "in those chronically exposed to respirable crystalline silica at the workplace at concentrations above 0.065mg per cubic metre".

SWA sought feedback on its draft evaluation report on respirable crystalline silica and coal dust, [Workplace Exposure Standards for Airborne Contaminants](#).

Source and full article - OHS Alert 19 February 2019

Diseases lawyer calls for work licensing in silicosis crisis

Australia needs an immediate "systemic fail-safe solution" to stop workers being exposed to deadly silica dust, according to a leading dust diseases lawyer, who proposes a nationwide licensing regime overseen by occupational hygienists.

Queensland Industrial Relations Minister Grace Grace warned that enforcement action will be taken against employers in the artificial stone benchtop manufacturing, finishing and installation industries that expose workers to silica dust through unsafe work practices.

Shine Lawyers partner and special counsel for its asbestos litigation team, Roger Singh, told *OHS Alert* that Grace's alert was a step in the right direction, but controls need to be "enshrined in legislation, where there can be no opportunity for exposure levels to occur in these workplaces".

Singh is in the process of submitting, to all states and territories, proposals for a "rigorous" regulation and legislative framework for controlling silica-dust exposure that includes a licensing process for businesses and workshop operators.

Licences would be subjected to annual renewal that will be permitted once an occupational hygienist confirms the workplace meets the threshold requirements set out at the regulatory level, he says.

Minister Grace said Queensland is developing explicit regulations to prohibit dry cutting of artificial stone and a Code of Practice that "will be finalised as soon as possible".

Source and full article - OHS Alert 21 September 2018

Silica common and carcinogenic

Silica dust causes more than 230 cases of lung cancer in Australia each year that can be prevented easily through dust controls and respirators, the Cancer Council has warned.

According to Cancer Council Australia, about 600,000 Australian workers like miners, construction workers, demolition workers, engineers and farmers are exposed to silica dust from stones, bricks, tiles, concrete, some plastics and other materials annually.

The chair of the Council's occupational and environmental cancer risk committee, Terry Slevin says. "Of around 11,000 new cases of lung cancer diagnosed each year in Australia, over 8000 are due to smoking, **230 due to silica dust** and 130 due to diesel exhaust. These are preventable and given the poor survival rate for lung cancer it is so vital we do all we can to prevent them,"

The silica cases "could have easily been prevented through dust prevention or control, adequate ventilation or personal respiratory protection", he says. Proper protection involves "a lot more than just wearing a mask".

Preventing workplace exposure to silica dust requires "on-site ventilation, using specialised tools with appropriate blades and dust suppression features and a range of other important safeguards" explained in a new Cancer Council [fact sheet](#) on the hazards of silica dust.

Source and full article - OHS Alert 12 October 2018

The Department of Mines, Industry Regulation and Safety

DMIR's published Mines Safety Bulletin No.163 on reducing exposure to respirable crystalline silica (quartz) Dated 18 March 2019.

The bulletin highlighted that chronic exposure to high concentrations of respirable crystalline silica (RCS) can cause silicosis and recommended actions to reduce exposure to workers.

http://www.dmp.wa.gov.au/Documents/Safety/MS_H_SB_163.pdf

Work cancers increasing globally, but falling in one sector

An international position statement has warned that occupational cancer has emerged as the primary cause of work-related deaths globally and explained what employers can do about it.

The position statement, from European health experts and Professor Tim Driscoll from the University of Sydney's School of Public Health, says cancer now accounts for nearly a third of the world's work-related disease deaths, and occupational cancer deaths increased from about 666,000 in 2011 to 742,000 in 2015.

Despite widespread efforts to prevent and control workplace exposure to carcinogens, occupational cancer mortality and morbidity levels have remained high, in part because the "current burden reflects the effect of past exposures" and provides little insight into the effect of recent measures, the statement says.

Alarming, it is likely that many of the past control measures (or measures similar to them) that have proved to be ineffective by the growing cancer numbers are still in place in many regions and workplaces.

Primary or secondary prevention measures that should be used by workplaces include replacing carcinogenic substances or agents with non-carcinogenic or less harmful substances, as required by an International Labour Organisation convention, and which happened with asbestos in many countries.

Where this isn't possible, the application of technical or organisational measures that *reduce* workers' exposure to carcinogens is particularly important, as is adopting or updating specific exposure limits – a process currently being undertaken by Safe Work Australia.

Organisations should also develop and disseminate specific training and information campaigns to raise awareness of occupational cancer risks.

[New avenues for prevention of occupational cancer: a global policy perspective.](#) Sergio Iavicoli, et al, Europe and Australia, *Occupational and Environmental Medicine*, Volume 76, Issue 6, June 2019. Source OHS Alert 24 May 2019



Single shot for deadly diseases

Local experts have come up with a single vaccine to simultaneously combat two of the world's most deadly respiratory diseases. The researchers say the single vaccination will overcome the limitations of current influenza and pneumococcal vaccines used around the world.

A big breakthrough came when a team at the University of Adelaide realised their new Influenza A virus vaccine under development (based on inactivated whole influenza virus) induces enhanced cross-protective immunity to different influenza strains, when it is co-administrated with the new class of pneumococcal vaccine.

They showed the enhancement in immunity is associated with a direct physical interaction between the virus and the bacterium.

Current influenza vaccines target surface molecules that are affected by mutations and so an annual update is required to match newly emerging viruses. Existing pneumococcal vaccines provide longer lasting protection but cover only a minority of disease-causing strains.

The researchers say there is a clear need for better vaccines capable of providing universal protection.

[More information is available here.](#)

Source and full article – OHSCareer 21st May 2019

IN THE COURTS



Company Owner Jailed in Victoria

A company owner has been jailed for recklessly endangering and killing a worker.

Maria Jackson, 72, was sentenced to six months' jail and fined \$10,000, plus \$7,336 in costs, after pleading guilty to breaching sections 24 ("Duties of self-employed persons to other persons") and 32 ("Duty not to recklessly endanger persons at workplaces") of the Victorian OHS Act.

The Latrobe Valley Magistrates Court heard that in February 2017, Jackson was operating a forklift at her scrap metal business in Foster while a worker stood in a metal bin on the forklift's tines, raised three metres above the ground, when both the worker and the bin fell from the tines.

The corner of the bin landed on the worker's head, causing fatal injuries.

The Court heard Jackson had never held a forklift licence, as required by the OHS Regulations, and the bin was corroded, while its base had only one rather than two channels for tines.

At the time of the incident, the bin was not engaged with the tines in any way, no attempt had been made to secure the bin to the forklift, the tines were too close together, and the forklift was operating on uneven ground, it heard.

The Court found that Jackson's conduct recklessly endangered another person at the workplace, and the risk eventuated when the worker fell from the bin. Jackson lodged an appeal against the sentence.

Meaning of foreseeability examined in \$1.4m injury case

An employer's duty to provide a safe system of work extends to maintaining and enforcing such a system, including where an alternative system creates a foreseeable risk of injury of *any* severity, an appeals court has found in upholding an injured worker's \$1.4 million award.

"Having established a safe operating process for [a bar bending machine], it was incumbent on [employer Best Bar Pty Ltd], by instructing its employees, to take reasonable care to maintain and enforce the utilisation of that safe method of work," Western Australian Court of Appeal Chief Justice Peter Quinlan and Justices Graeme Murphy and Robert Mitchell said.

"The [worker] was not instructed to use that method at all times and, to the [employer's] knowledge, was not doing so," they said.

In May 2013, the worker sustained serious back injuries after repeatedly bending to manually lift bundles of short steel bars, of up to 20kg per bundle, out of the bending machine and twisting to place them on a table, for about two hours.

As reported by *OHS Alert* early last year, he sued Best Bar for damages, and District Court Judge Audrey Braddock heard the machine was used in two ways; the "standard" method where the machine's discharge arms automatically raised bent bars and rolled them towards the operator; or the manual "short bar" method used by the worker when he was injured.

Judge Braddock found: the worker mistakenly believed he needed to use the latter method for short bars to prevent them tangling; it was more likely than not that he had been trained to use this method; and Best Bar's OHS officer and shift safety representative were both aware that the method was used.

She awarded the worker \$1,389,300 in damages, finding the employer negligently failed to assess the obvious manual handling risks associated with the short bar method, and could have reduced the risk of injury by enforcing the use of the standard method.

The employer appealed, telling Chief Justice Quinlan and Justices Murphy and Mitchell there was no evidence that: the bundles of short bars were too heavy for the worker to lift; lifting them created a foreseeable risk of injury; or risk assessing the short bar method would have found it wasn't safe.

But the full bench found that as the standard method was designed to reduce the risk of injury, and assessed as safe by an expert witness, it was an "irresistible conclusion" that the short bar method was less safe in requiring operators to bend forward and manually lift objects.

They also stressed that when assessing whether a risk of injury was foreseeable, it wasn't necessary to determine whether a duty holder could have foreseen a specific injury, the severity of an injury or the precise sequence of events leading to an injury.

In the case at hand, the issue was whether the short bar method gave rise to the foreseeable risk of any form of back injury, from short-lived muscular strain to seriously debilitating spinal damage, Chief Justice Quinlan and Justices Murphy and Mitchell found.

"In our view, it was not necessary for there to be particular evidence as to the degree of risk posed by lifting 12 to 20kg loads on 13 to 19 occasions in order for her Honour to be satisfied that manual lifting of the kind undertaken by the worker (with the knowledge of the employer) gave rise to a foreseeable risk of back injury," they said in dismissing the appeal.

[BEST BAR PTY LTD -v- WARN \[2019\] WASCA 15 \(29 January 2019\)](#)

Source – OHS Alert 31 January 2019



Fatigue laws to accommodate new devices, better shifts

Australia's fatigue management laws are not stopping fatigued workers from driving heavy vehicles and must be amended to address shift structures and other factors that increase the risk, according to a paper by the new Heavy Vehicle National Law (HVNL).

The current HVNL's fatigue management requirements involve a combination of maximum work hours and minimum rest breaks, typically demonstrated by a work diary, the 56-page National Transport Commission [issues paper](#).

It subsequently published a "world-first" study on the benefits of using alertness monitoring technology to identify fatigue in truck drivers, saying the findings will be considered during the drafting of the new HVNL.

In releasing the new fatigue management paper – the second issues paper in the eight-part series – NTC CEO Gillian Miles said the current fatigue rules are complex and difficult to understand and comply with.

The paper says the "work and rest" approach doesn't recognise or accommodate the heavy vehicle transport industry's wide diversity.

It is inconsistently applied but more rigid than similar overseas regimes, and "focuses on fatigue risk prevention controls rather than mitigation controls or outcomes".

The paper identifies six "aspirations" for the new HVNL, including that it reduces fatigue incidents by, for example, specifically targeting fatigue-

related single heavy vehicle crashes, and addresses "all threats and consequences, not just those associated with long-haul operations".

"The new HVNL should nurture a safety culture among heavy vehicle operators, with a view to continuous improvement. It should encourage operators to develop and apply their technology, practices and systems, and to share what they learn," the paper says.

"It should support the use of fatigue management systems with fatigue monitoring technology, especially if they are more effective than prescriptive hours," it says.

Further, the new HVNL should address shift-related factors, "beyond simple hours", which influence or increase fatigue.

These include the fact that: fatigue risks are higher when driving at night; early day-shift starts result in higher levels of drowsiness at the beginning of the shift; schedules that change a driver's routine, like backward shift rotations, are associated with high drowsiness levels; and frequent breaks from driving improve alertness and performance, the paper says.

The NTC raises 12 questions for [feedback](#) (by 16 August), including, "How should a new HVNL address driver health and lifestyle factors?" and "How can we better accommodate emerging technologies?"

[Effective fatigue management, Issues paper, National Transport Commission, May 2019](#)

Source – OHS Alert 21 May 2019

Black lung case sends health message, but won't end in prosecution

A NSW worker with coal workers' pneumoconiosis, or black lung, was exposed to "dust exceedances" while working on longwalls at Dartbrook Colliery, which was threatened with closure for repeated airborne dust sampling failures, and ceased production several months later in late 2006, the NSW Resources Regulator has [found](#).

But despite "Worker Y" working at the dusty colliery between 1996 and 2006, the regulator said the fact that he joined the coal mining industry in 1980 meant it was "not possible to assert with certainty" the extent to which Dartbrook contributed to his lung disease.

It said that as a result, it had decided not to take any enforcement action in relation to the matter but urged all coal mine workers to undergo regular health screening.

"Worker Y's medical condition... underlines both the need for all current and former coal mine workers to get regular checks and the importance of the stringent regime we now have in place here in NSW," the regulator's acting deputy secretary and chief compliance officer Anthony Keon said.

"Our approach is a combination of the most rigorous coal dust exposure limits in Australia; legislated requirements for achieving minimum standards of ventilation; monitoring of airborne contaminants in the [work] environment; and prescribed worker health monitoring regimes for exposure to airborne dust," he said.

"Coal mine workers receive periodic health surveillance every three years. Medical assessments are also undertaken for all coal mine workers prior to commencing employment and assessments are offered to workers when they leave the industry."

Keon added that the regulator targeted inspections and mandatory tests were working, with "nearly all" NSW coal mines reducing dust exposure levels to "well below the prescribed allowable limits".

[Investigation report, Coal worker pneumoconiosis – Worker Y, NSW Resources Regulator, May 2019](#)

Source – OHS Alert 23 May 2019

Occupational Health Society of Australia (WA)



Membership of the Society is open to all those interested in occupational health and safety.

\$100 Corporate membership

\$50 ordinary membership

\$20 student membership.

Simply email

ohswa@outlook.com.au

with your details.

Incorporated in 1978, the Occupational Health Society of Australia (WA Branch) is a non-profit association which provides a forum for the wide range of disciplines engaged in the occupational health profession in Western Australia. The aims of the Society are:

- to develop effective occupational health practice within Western Australia
- to encourage awareness by individuals, organisations and other bodies, of the role of occupational health
- to provide a forum for professional contact between persons interested in, and working in, occupational health
- to express an independent, professional viewpoint on all aspects of occupational health considered desirable in the public interest
- to seek the improvement or an extension of the existing legislation for the promotion of safety and health at work
- in order to ensure uniform principles are applied in all occupational activities.

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