



L-R Hon Bill Johnston, MLA, Terry Slevin, Prof Lin Fritschi, Dr Michael Maxwell, Dr Peter Connaughton, Michael Tunnecliffe

Outcomes from the Society seminar - Improving occupational health for West Australians

Almost 70 people attended the Society seminar held on 13 July. Feedback to date has been very positive and justified the various topics presented by a range of eloquent and competent speakers.

The program opened with an address by the Minister for Mines and Petroleum; Commerce and Industrial Relations; Electoral Affairs; Asian Engagement, the Hon Bill Johnston MLA.

The Minister commented on the adoption by most states of the model OHS legislation and advised that the Government has approved development on a modernised Bill which will improve consistency nationwide and provide primary legislation for OSH across all industries and will be based on the national Work Health and Safety Act.

Particular mention was made of the resources safety sector which will require a variety of methodologies – prescription, risk based approaches, safety case and mine safety management systems.

The Minister confirmed that the key service of the new combined department will be the regulation of workplace safety and health with the ultimate goal the delivery of better services to the WA community. Importantly, the Government would continue to listen and consult.

The topic of occupational cancers was addressed by joint speakers Professor Lin Fritschi, School of Public Health Curtin University and Terry Slevin representing the Cancer Council WA.

Dr Michael Maxwell, Special Counsel, Clayton Utz followed with a paper titled *Hazardous Chemicals Exposures in Australia: Current Status and Direction* which concluded with some key takeaways to be kept in mind at all times when dealing with hazardous chemicals.

Following the post-morning tea break, Associate Professor Peter Connaughton discussed the role of occupational physicians in monitoring and improving the health of workers under the Model WHS laws and the programme concluded with a comprehensive paper by Michael Tunnecliffe identifying the duty of care requirements which are expected to be incorporated in the legislation scheduled for 2019.

The presented papers are available in their entirety from the Society's website www.ohswa.marcsta.com.



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Archived editions of the Monitor are available online at www.marcsta.com

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Legislative/regulatory matters

Ministerial Advisory Panel

During July 2017, the Minister for Mines and Petroleum; Commerce and Industrial Relations, the Hon Bill Johnston MLA, moved to establish a Ministerial Advisory Panel (MAP) on Work Health and Safety (WHS) Reform.

The panel is being formed to advise on the development of a single harmonised and amalgamated WHS Act, covering general industry and the resources sector in WA.

Membership:

- Stephanie Mayman, Chair
- a representative from the Chamber of Minerals and Energy WA;
- a representative from the Chamber of Commerce and Industry WA;
- a representative from UnionsWA;
- two representatives from the Department of Mines, Industry Regulation and Safety - Resources Safety and WorkSafe Divisions;
- Ms Penny Bond (Ministerial Senior Policy Adviser); and
- Mr Simon Millman MLA, Member for Mount Lawley.

Terms of reference:

The Government intends to introduce into Parliament, as soon as possible, a single WHS Act regulating work health and safety in WA. The Act will be administered by MIRS.

Thereafter, the role of the panel will be to advise on the relevant industry regulations.

MAP will advise the Minister on the content of the WHS Act having regard to:

- The current legislation, being the OHS Act 1984, MSIA Act 1994, Petroleum and Geothermal Act 1967, Petroleum (Submerged Lands) Act 1982, Petroleum Act 1969 and Petroleum and Geothermal Energy Safety Act 2014.
- The importance of implementing harmonised laws in Australia generally, by implementing the **optimal structure and content of the Model WHS Act in drafting the Single Act.**

- Whether the matters regulated under the Dangerous Goods Act 2004 should:

- be incorporated into the single Act; or
- remain as a stand alone, but modernised Act.

To facilitate consultation **in the most effective manner**, the MAP will utilise the COSH and MIAC as a means of consulting within industry more closely. Additionally, the MAP chair will report on developments at the COSH and MIAC meetings.

Parliamentary inquiry into WorkSafe

The Public Administration Committee of the WA Legislative Council is conducting an inquiry into WorkSafe WA with the following terms of reference:

- a) WorkSafe's performance against the objects of the Occupational Health and Safety Act 1984
- b) funding and resourcing of WorkSafe
- c) adequacy of WorkSafe's training, oversight and accountability processes
- d) adequacy of administrative processes, including complaints, investigations and prosecution processes
- e) adequacy of WorkSafe's audits of training providers delivering occupational health and safety training
- f) timely implementation of and public education about coronial inquest recommendations arising from a workplace death
- g) legislative and jurisdictional issues
- h) any other relevant matter.

The Occupational Health Society of Australia (WA) has provided a submission to the Inquiry documenting its concerns with the low status being accorded existing and emerging occupational health issues in the workplace at this time.

The submission will be placed on the Society's website in due course.



Grenfell disaster. Photograph: Paul Ellis/AFP/Getty Images

BRITISH PM URGED TO SCRAP SAFETY DEREGULATION

The UK Government has been urged to end its ideologically driven deregulation of health and safety in the wake of the Grenfell Tower blaze. Over 70 organisations and figures from the UK's safety and health profession have jointly called for "a political sea change in attitude towards health and safety regulation and fire risk management following the tragedy. We leaders in health and safety in the UK call on you to scrap the government's approach to health and safety regulation and think again."

Journalist Polly Toynbee, writing in the Guardian, noted "whatever national appetite for deregulation and risk there might have been has gone.." A third of environmental health officers have gone since 2010 and the Health and Safety Executive is taking a 46 percent cut and has been banned on principle from proactive inspections in most workplaces; staff have to wait for a complaint – when it may be too late. Inspectors are down by 25 percent and the number of workplace inspections cut back by 70 percent.

Source: Risks 805, 24 June 2017

Queensland to introduce new criminal negligence laws

According to Queensland's Employment Minister, Grace Grace, the government will create a new offence criminalising negligence causing death in the workplace in the wake of last year's Dreamworld and Eagle Farm tragedies.

Tim Lyons, who is conducting Best Practice Review of Workplace Health and Safety, has recommended the offence should be introduced.

Ms Grace said that as the government supported the preliminary recommendation, consultation with stakeholders could commence immediately to determine the best practice model for introduction and implementation of the offence.

Source: Nine News, 20 May 2017

SAFETY


MIRS SNAPSHOTS

The Department of Mines, Industry Regulation and Safety (MIRS) has launched the first monthly performance snapshot.

The monthly snapshots will address key topics in the minerals sector that have been identified by the department as potential areas of concern.

The quarterly performance snapshots will focus on injury and incident data provided to the department by the minerals sector for a three month period.

The snapshots can be downloaded from the department's website and can be used by employers and workers to assist in the development and promotion of safe work practices on mining operations.



Government of Western Australia
Department of Mines, Industry Regulation and Safety
Resources Safety

Monthly Safety and Health Snapshot

for the Western Australian minerals sector


Suspended loads


Issued August 2017

Suspended loads need careful handling to prevent serious injury or fatality. A suspended load has the potential to not only drop straight down, but to swing and strike people who are not directly beneath it. It is important to conduct appropriate risk assessments for work associated with or near suspended loads.

This snapshot covers suspended load incidents for the period from 1 May 2016 to 30 April 2017.

For more information about occupational safety and health, visit our website www.dmirs.wa.gov.au

 @DMIRS_WA

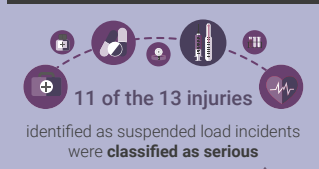
 Department of Mines, Industry Regulation and Safety

Notifiable incidents by area

38 of the 39 notifiable incidents occurred during **surface operations**

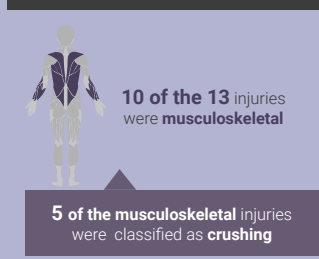


Injuries by severity

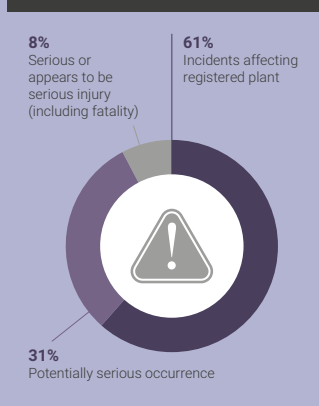


4 of the 11 injuries were **lost time injuries**

Injuries by nature



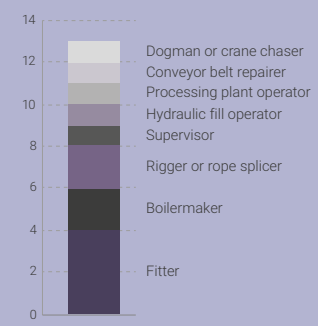
Notifiable incidents by reporting category



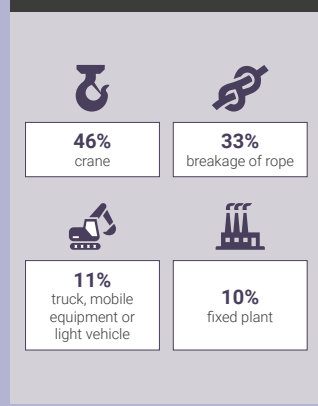
Injuries by employment type



Injuries by occupation



Notifiable incidents by description summary



Note: The information in this snapshot has come from a keyword search of incident reports.



South Africa – reckless dereliction results in multiple underground deaths

The failure to properly close old mine shafts has created orphans and cost poor artisanal workers their lives, the Congress of South African Trade Unions (COSATU) says.

The union has issued a call for urgent action following an 11 May explosion 3km underground at the decommissioned Eland Shaft in Welkom which killed more than 40 illegal artisanal miners.

“Government cannot continue to explain away these senseless deaths and the mining sector cannot pretend that these incidents have nothing to do with them. Mine owners have to deal with the fact that they are primarily responsible for creating an environment, where people are dying like flies every day.

COSATU said both government and mining companies should “urgently put measures in place to make amends and clean up the mess that they have created all across the country.”

“We want to hear them offering concrete proposals on how they are going to improve in implementing mine closures, especially considering the mining industry’s poor environmental legacy. We still see many mines being abandoned, with mine shafts left open, resulting in the development of contaminated mine water.

“This has spawned this tragic phenomenon of illegal mining.”

Source: TUC Risks, 801, 27 May 2017

Director convicted of manslaughter after site deaths

In the UK, a company director has been convicted after he failed to undertake an adequate risk assessment and provide training to two workers who fell to their deaths whilst working at a site in Cadogan Square in central London.

The workers were expected to use a rope to haul a sofa over a balustrade and into a first floor apartment. Advice from an experienced and reputable lifting company on how to carry out the process safely was ignored due to time and budgetary constraints. Both workers fell after the Victorian railings on the balcony gave way as the furniture was being manoeuvred into the premises. One worker was pronounced dead at the scene, the other was taken to a central London hospital in a critical condition where he later died.

The risks of the lifting operation were entirely foreseeable and avoidable.

The principal and his company were found guilty of two criminal safety charges and convicted of two counts of industrial manslaughter. The principal was jailed for 14 months and the now defunct company fined UK £1.2m.

The court was told the entire workforce spoke Polish as their first language, yet the firm’s policy documents and risk assessment were only available in English.

Source: TUC Risks 801, 27 May 2017





UK Government's air quality plan branded inadequate

Britain's plan to ban all new petrol and diesel cars and vans from 2040 has been branded inadequate by the leaders of eight heavily polluted cities, as **campaigners said banning petrol and diesel cars would not help the thousands dying each year from illnesses linked to toxic fumes.**

The criticism means the government could face further legal action to force it to produce a more comprehensive plan, with environmentalists, doctors and opposition politicians arguing it is insufficient to deal with a 'health emergency' estimated to be killing some 40,000 people a year.

Some energy experts also warned that a wholesale switch from conventional to electric cars could put the National Grid under huge pressure and require many new power stations.

Senior doctors specialising in child health expressed dismay at the failure to take more decisive action. Professor Neena Modi, president of the Royal College of Paediatrics and Child Health, said there was **"indisputable evidence demonstrating the tragic effects [air pollution] has on the development of the lungs and hearts of children."**

Source: *The Guardian*, 27 July 2017

Diesel exhaust fumes slow down children's brains

Children's brains slow down when they are exposed to high levels of air pollution.

The disturbing findings appear to confirm some scientists' fears that polluted air in Britain's cities is poisoning youngsters' brains as well as their lungs. Earlier this year a study linked toxic air to 40,000 deaths a year in the UK - and Brussels warned Britain it could face fines if it continued to breach EU air pollution limits.

The latest alert comes from Barcelona's Centre for Research in Environmental Epidemiology.

Researchers found that pupils who breathed in toxic diesel fumes on the way to school struggled to perform as well as normal. They took longer to respond to a question and have a harder time concentrating.

The disturbing findings appear to confirm fears that polluted air in Britain's cities is poisoning youngster's brains as well as their lungs.

Prime Minister Theresa May recently warned that air pollution was the fourth biggest health risk behind cancer, obesity and heart disease.

Source: *Daily Mail*, 6 June 2017

Health and safety professionals call for action on diesel particulates

The Institution of Occupational Safety and Health (IOSH) has called on the British Government to reduce worker exposure to cancer causing diesel particulate.

Commenting on the UK's newly published Air Quality Plan, IOSH says that the plan fails to address the cancer-causing elements of diesel exhaust emissions in Britain where it is estimated that more than 650 people die every year of lung or bladder cancer linked to exposure to diesel exhaust fumes at work, while around 800 new cases of cancer caused by exposure are registered each year.

Bus, car and lorry maintenance engineers, professional bus drivers, lorry drivers, forklift drivers and other warehouse workers, tractor drivers, miners and construction workers are examples of occupations exposed at work.

Source: *TUC Risks* 811, 5 August 2017

Diesel pollution (PM2.5) linked to heart damage and death

According to research presented at the Euro Cardiovascular Magnetic Resonance conference in May, diesel pollution mainly from road vehicles, is linked to heart damage and death.

This appears to be driven by an inflammatory response – inhalation of fine particulate matter (PM 2.5) which causes localised inflammation of the lungs followed by a more systematic inflammation affecting the whole body.

The study included 4,265 participants from the UK Biobank, a large community-based cohort study.

Lead researcher Dr Nay Aung from Queen Mary University of London said "We found that the average exposure to PM 2.5 in the UK is about 10 µg/m³ in our study. This is way below the European target of less than 25 µg/m³ and yet we are seeing these harmful effects. **This suggests that the current target level is not safe and should be lowered.**"

Source: *ScienceDaily*, 26 May 2017

AIR POLLUTION Air pollution could be disrupting your sleep

Scientists from the University of Washington have found that people who live in areas with elevated levels of carbon dioxide often experience disrupted sleep over time.

A sampling of about 2,000 people showed that those who slept in areas with the highest level of traffic-related carbon dioxide had a nearly 60% increased likelihood of having low sleep efficiency, or the percentage of time spent sleeping versus lying awake in bed.

Those who slept in areas with the highest levels of small particulates had a 50% increased risk of disrupted sleep.

Martha E Billings, an assistant professor of medicine at the University of Washington said "These new findings indicate the possibility that commonly experienced levels of air pollution not only affect heart and lung disease, but also sleep quality. Improving air quality may be one way to enhance sleep health and perhaps reduce health disparities."

Source: *ScienceDaily*, 25 May 2017

Air pollution – the latest WHO report

Latest data from the World Health Organization estimates that air pollution killed 6.5 million people in 2012. Exposure to high levels of air pollution affects human respiratory and inflammatory systems, and also leads to heart disease and cancer.

Scientists say that air pollution not only contributes to climate change but is also exacerbated by it.

Some major facts contained in the report:

Air pollution also increases the risk of acute respiratory infections.

- PM2.5, about one-thirtieth of the width of a human hair, can penetrate deep into the lungs and the cardiovascular system, posing the greatest risks to human health.
- Only one in 10 people live in a city that complies with the WHO air quality guidelines, which is a PM2.5 annual average of 10 micrograms per cubic metre.

Source: *Times of India*, 18 May 2017

HEALTH - PHYSICAL

The business case for occupational health

The British Society of Occupational Medicine (SOM) has published a guide for employers, managers, clinicians and policy makers outlining the business case for, and value of, investing in occupational health.

It has brought together under one roof the available evidence to show the business, financial, legal and moral case for investing in occupational safety and health and health promotion.

It also analyses the case for investing in occupational health services.

Mini printed leaflets of the document are being made available for employers and HR professionals and, through an agreement with the union body the TUC, there is a summary leaflet for workers and their representatives.

The document is available online through the SOM website as well as through the Why Occupational Health? website.

Source: *Personnel Today*, 1 June 2017



Contaminated air on planes linked to occupational and public health consequences

New research led by the University of Stirling UK, has shown a clear link between being exposed to air contaminated by engine and other aircraft fluids, and a variety of health problems.

The study examined more than 200 air crew and found many had been exposed to a number of substances through aircrafts' contaminated air. They uncovered a clear pattern of acute and chronic symptoms, ranging from headaches and dizziness to breathing and vision problems.

Dr Susan Michaelis from the research group said: "This research provides very significant findings relevant to all aircraft workers and passengers globally. There is a clear cause-and-effect relationship linking health effects to a design feature that allows the aircraft air supply to become contaminated by engine oils and other fluids in normal flight. This is a clear occupational and public health issue with direct flight safety consequences.

Source: *TUC Risks 805*, 24 June 2017





Dermatitis - harmful ingredients in hand cleansers often the case

According to the US Centers for Disease Control and Prevention, up to 40 percent of workers will suffer from occupational dermatitis at some point in their working lives.

People often read food labels to ensure a product they're consuming doesn't contain harmful ingredients such as preservatives, trans-fats, and artificial sweeteners. However, they are unlikely to look at the ingredients in their hand soap.

In addition to the physical impact dermatitis can have on a person, it can also create a financial burden. According to the US Bureau of Labor Statistics 50 percent of all working time lost to industrial illness is due to dermatitis.

Just one case of occupational dermatitis can cost an employer approximately US\$3,500 in workers' compensation claims, and an average disability of 23.9 days, according to the Journal of the American Medical Association. **As with all occupational disease, prevention is the key, and with most cases of occupational dermatitis, prevention entails minimising or eliminating skin contact with chemicals or other unhealthy, damaging ingredients to help prevent the disease.**

Just like there are healthy ingredients used as substitutes in recipes, there are also alternatives when it comes to hand soaps. It's important to embrace a product that takes into consideration the impact it has on hands, yet is still powerful and effective enough for the job. Low-solvent and solvent-free cleansers are a safer option than those containing petroleum solvents. Bio-scrubbers such as walnut shells, corn meal, and olive pit are effective without stripping or causing damage to the skin.

Source: OHS Online, 20 June 2017



PHYSICIANS' AGE LINKED TO PATIENTS' MORTALITY RISKS

Hospitalised patients have a slightly higher risk of dying when treated by older internal medicine specialists who oversee the care of acutely ill hospitalised patients, new research concludes.

Harvard Medical School and Harvard T.H. Chan School of Public Health research findings, published May 16 in *BMJ*, reveal the largest gap in patient mortality -- 1.3 percentage points -- between hospitalists 40 and younger and those 60 and older.

The researchers note that the absolute difference in death rates was modest yet clinically meaningful -- 10.8 percent among patients treated by physicians 40 and younger, compared with 12.1 percent among those treated by physicians 60 and older. That difference translates into one additional patient death for every 77 patients treated by physicians 60 and older, compared with those treated by doctors 40 and younger.

"This difference is not merely statistically significant, but clinically important -- it is comparable to the difference in death rates observed between patients at high risk for heart disease who are treated with proper heart medications and those who receive none," said study senior investigator Anupam Jena, the Ruth L. Newhouse associate professor of Health Care Policy at Harvard Medical School and an internal medicine physician at Massachusetts General Hospital.

Importantly, the researchers note, physician age made no difference in mortality outcomes for doctors who managed large numbers of patients. That finding, the research team said, suggests that treating more patients may have a protective effect on maintaining clinical skills.

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The study findings, the authors said, point to the importance of physicians participating in continuing medical education courses throughout the entire span of their professional lives. They also suggest that direct measurement of patient outcomes -- rather than reliance on surrogate measures such as test scores -- may be a more meaningful gauge of how physicians' skills evolve over time.

Source: *ScienceDaily* 17 May 2017

Hospital doctors need a break

A report by the Royal College of Surgeons of Scotland says that fatigue is putting lives at risk.

A survey of more than 500 consultants and trainees across the UK found fatigue and high stress levels are impacting on morale and patient safety.

One recommendation was a call for the return of the hospital dining room to give under-stress doctors a break and help improve patient safety.

Researchers commented: "This study has shown that there remains inadequate access to hot food and appropriate facilities where staff can relax during their breaks without meeting patients or their relatives."

Many hospital workers, including nurses, have complained that cutbacks have meant that separate staff facilities have been withdrawn and there is nowhere that they can eat or have a break away from patients.

An absence of separate staff facilities also prevents them being able to discuss work issues with colleagues.

Source: *TUC Risks*, 811, 5 August 2017



A T-shirt that monitors the wearer's breathing rate in real time invented

Prototype of the spiral antenna integrated into a cotton shirt. Inset: SEM images of the multi-material fibre structure. (© MDPI)

Researchers have created a smart T-shirt that monitors the wearer's respiratory rate in real time. This innovation, the details of which are published in the latest edition of *Sensors*, paves the way for manufacturing clothing that could be used to diagnose respiratory illnesses or monitor people suffering from asthma, sleep apnea, or chronic obstructive pulmonary disease.

Unlike other methods of measuring respiratory rate, the smart T shirt works without any wires, electrodes, or sensors attached to the user's body, explains Younes Messaddeq, the professor who led the team that developed the technology. "The T shirt is really comfortable and doesn't inhibit the subject's natural movements. Our tests show that the data captured by the shirt is reliable, whether the user is lying down, sitting, standing, or moving around."

The key to the smart T shirt is an antenna sewn in at chest level that's made of a hollow optical fiber coated with a thin layer of silver on its inner surface. The fiber's exterior surface is covered in a polymer that protects it against the environment. "The antenna does double duty, sensing and transmitting the signals created by respiratory movements," adds Professor Messaddeq, who also holds the Canada Excellence Research Chair in Photonic Innovations. "The data can be sent to the user's smartphone or a nearby computer."

As the wearer breathes in, the smart fiber senses the increase in both thorax circumference and the volume of air in the lungs, explains Messaddeq. "These changes modify some of the resonant frequency of the antenna. That's why the T shirt doesn't need to be tight or in direct contact with the wearer's skin. The oscillations that occur with each breath are enough for the fiber to sense the user's respiratory rate."

To assess the durability of their invention, the researchers put a T shirt equipped with an antenna through the wash -- literally. "After 20 washes, the antenna had withstood the water and detergent and was still in good working condition," says Messaddeq.

Source: *ScienceDaily*, 18 May 2017

Heart risk warning as inhaled particles found in blood

Researchers have issued a workplace health warning after a study showed gold nanoparticles can cross from the lungs into blood, where they accumulate in fatty plaques inside arteries.

The study of the effects of these tiny particles on human subjects by UK and Dutch researchers provides further evidence of a link between nanoparticles and cardiovascular disease and has 'major implications' for risk management of engineered nanoparticles in the workplace and wider environment.

The authors said their inhalation study findings have 'immediate relevance' for the nanotechnology industry, noting a better understanding of how these substances behave in the body is 'vital for a safe-by-design approach for new nanomaterials.

Source: *SafetyNetJournal* 404, 24 May 2017

Warm weather increases the risks of Surgical Site Infections

Surgical site infections (SSIs), a common healthcare-associated infection, are seasonal -- increasing in the summer and decreasing in the winter--according to new research published online in *Infection Control & Hospital Epidemiology*, the journal of the Society for Healthcare Epidemiology of America. Temperatures above 90°F (32°C) were associated with 28.9 percent increased odds for hospitalization with a surgical site infection (SSI) compared to temperatures less than 40°F (4.5°C).

"We show that seasonality of surgical site infections is strongly associated with average monthly temperature. As temperatures rise, risk increases," said Philip M. Polgreen, MD, senior author of the study, Director of the Innovation Lab at The Signal Center for Health Innovation and Associate Professor of Internal Medicine and Epidemiology at the University of Iowa. "However, the odds of any one person getting an infection are still small, and due to the limitations of our data, we still do not know which particular surgeries or patients are at more risk from higher temperature."

Source: *ScienceDaily*, 16 May 2017

WORKERS' COMPENSATION

WA workers' compensation – latest developments

- The prescribed sum is the maximum amount an injured worker can receive in terms of weekly payments for loss of earnings during the life of their claim. It is indexed annually based on changes to the Wage Price Index.

WorkCover WA has increased the prescribed sum for the financial year 2017/18 by 1.37% from \$221,891 to \$224,921.

- The Minister for Commerce and Industrial Relations, the Hon Bill Johnston MLA has announced the development of a Bill to amend the Workers' Compensation and Injury Management Act to increase lump sum compensation for dependents and increase the weekly allowance paid to support dependent children.

Occupational disease contracted despite low level of exposure

The Korea Workers' Compensation and Welfare Service (COMWEL) has ruled that a 33-year-old worker who was diagnosed with leukaemia after working for five years and seven months in a Samsung Display – formerly Samsung Electronics – LCD factory had contracted the illness in the course of his employment.

This is the first time that leukaemia has been recognised as an occupational disease in this setting.

In its judgment, COMWEL found that "Considering the fact that Kim did not wear adequate protective gear and worked long hours, it is likely that he was exposed to carcinogens and harmful substances in greater concentrations than were found in the epidemiological study."

Source: *Cancer Hazards*, 14 July 2017



HEALTH - PSYCHOLOGICAL

Mental wellbeing 'left out' of workplace health and safety policies

A British safety consultant, Paul Makoff-Clark, managing director of Kent Safety Solutions (UK) has warned that, despite increased awareness, construction companies are still failing to recognise the importance of mental wellbeing in their health and safety policies.

Despite the Health and Safety Executive (HSE) finding that 12 million working days were lost due to stress, depression and anxiety in 2015/16 he warns that employers are not considering the impact of mental health as part of their procedures,

Makoff-Clark explains that although there is a legal requirement for organisations to have health and safety procedures in place, many employers focus just on the safety aspect when implementing policies and carrying out risk assessments.

"Safety controls are relatively straightforward to implement," he says.

"But mental health is much more difficult to consider from a risk perspective due to the difficulties posed by pre-existing health conditions, less evident risks and potentially longer-term consequences."

"Mental health, particularly stress, is being left out of health and safety processes such as risk assessments. With many credit-crunch roles remaining unfilled and one person taking on additional responsibilities along with time-fixed deadlines so prevalent in many industries, especially construction, work-related stress is responsible for a phenomenal number of days lost due to absence."

"Sadly, mental health is still not embedded in an organisation's everyday thinking – it's just not considered in risk assessments. Very few employers are asking, 'how do I avoid damaging my employees' mental health because of workplace stress?' and they absolutely should be [asking]."

Source: Builders and Engineers, 17 May 2017

Suicide in WA construction industry

A new report compiled by Deakin University on behalf of Mates in Construction (MIC) shows that 469 WA construction workers died as a result of suicide between 2001 and 2015, an average of just over 33 people in a year.

A quarter of all suicides in WA during that period were construction workers.

MIC identified the macho nature of the male-dominated industry as one of the reasons the suicide rate for construction workers was 52 per cent higher than those who worked outside the sector.

During suicide awareness training provided between July 2016 and May of this year, it was revealed that 73 per cent of participants had been exposed to suicide in some way.

Source: Perth Now, 30 July 2017

New study on the high incidence of suicide in working men

Dr Allison Milner, a researcher at the University of Melbourne has received a four year fellowship grant to research the high incidence of suicide in working men in Victoria.

Initial studies show stressful conditions are a major risk factor for mental health problems and suicide among men and the research aims to find the reasons and link workplaces into health services which can help.

The grant has been funded from the Victorian Government's \$20m plan to ensure Victoria stays a world leader in health and medical research that has the power to change lives.

Source: SafetyNetJournal 412, 26 July 2017



UK workplace suicide

Studies in the US, Australia, France, Japan, China, India and Taiwan point to a steep rise in work suicides.

Researchers have linked these suicides to a generalised deterioration of working conditions, including unmanageable workloads and increased job insecurity.

Despite evidence of a comparable rise in the UK, workplace suicide remains a largely hidden phenomenon that is unrecognised in legislation, absent from official statistics, overlooked by the authorities and widely misunderstood.

In the UK, work-related suicides are not officially monitored or recorded. In the absence of official data or evidence, public authorities and employers have been able to turn a blind eye.

An Office for National Statistics (ONS) analysis commissioned by Public Health England (PHE) and published in March 2017 calculated national suicide rates in England broken down by occupation.

The ONS suicide prevalence statistics for 2011 to 2015 confirmed for women, occupations with a high risk of suicide include nurses (23 per cent above the national average), primary school teachers (42 per cent above average) and those working in culture, media and sport (69 per cent above average).

For men, low skilled male labourers, particularly those working in construction, had a risk that was three times higher than that the average for England; men working in skilled construction jobs also had an increased risk. Both male and female care workers have a risk of suicide that was almost twice the national average.

Source: Hazards Magazine, March 2017

16 / MONITOR / JULY/AUGUST 2017

Over 22% of truck drivers experience mental health issues

The Transport Workers' Union has implemented a plan to tackle mental health issues across the transport industry after a new survey showed over one in five truck drivers have said they experienced mental health issues.

The initiative will provide training across the union to ensure organisers and delegates are equipped to deal with mental health issues among workers, and also more towards engagement of employers and clients on developing workplace policies on mental health.

Source: SafetyNetJournal, 17 May 2017

SLEEP / FATIGUE

Climate change and losing sleep

A new study of US data suggests a sleep-deprived planet by the end of the century. Researchers show that unusually warm nights can harm human sleep and that the poor and elderly are most affected. Rising temperatures will make sleep loss more severe.

Published by Science Advances, the research represents the largest real-world study to date to find a relationship between reports of insufficient sleep and unusually warm night time temperatures. It is the first to apply the discovered relationship to projected climate change.

The study starts with data from 765,000 US residents between 2002 and 2011 who responded to a public health survey, the Behavioral Risk Factor Surveillance Survey from the Centers for Disease Control and Prevention. The study then links data on self-reported nights of insufficient sleep to daily temperature data from the National Centers for Environmental Information. Finally, it combines the effects of unusually warm temperatures on sleep with climate model projections.

The main finding is that anomalous increases in night-time temperature by 1°C translate to three nights of insufficient sleep per 100 individuals per month.

To put that in perspective, if we had a single month of nightly temperatures averaging 1°C higher than normal, that is equivalent to 9 million more nights of insufficient sleep in a month across the population of the United States today, or 110 million extra nights of insufficient sleep annually.

Using climate projections for 2050 and 2099 by NASA Earth Exchange, the study paints a bleak picture of the future if the relationship between warmer nights and disrupted sleep persists.

Source: ScienceDaily, 26 May 2017

Sleep loss affects your waistline

Research presented at the European Congress of Endocrinology in Lisbon in May highlighted how disrupted sleep patterns, a common feature of modern living, can predispose to weight gain, by affecting people's appetite and responses to food and exercise.

Dr Christian Benedict from Uppsala University, Sweden conducted a number of human studies to investigate how sleep loss may affect energy metabolism. These human studies have measured and imaged behaviours, physiological and biochemical responses to food following acute sleep deprivation. The behavioural data reveal that metabolically healthy, sleep-deprived subjects prefer larger food portions, seek more calories, exhibit signs of increased food-related impulsivity, experience more pleasure from food and expend less energy.

The group's physiological studies indicate that sleep loss shifts the hormonal balance from hormones that promote fullness (satiety) such as GLP-1, to those that promote hunger, such as ghrelin. Sleep restriction also increased levels of endocannabinoids, which are known to have appetite-promoting effects.

Further, workers from Dr Benedict's team shows that acute sleep loss alters the balance of gut bacteria which has been widely implicated as key to maintaining a healthy metabolism. The same study also found reduced sensitivity to insulin after sleep loss.

The group are now investigating longer-term effects and also whether extending sleep in habitual short sleepers can restore these alterations in appetite and energy metabolism.

Dr Benedict concludes "My studies suggest that sleep loss favours weight gain in humans. It may also be concluded that improving sleep could be a promising lifestyle intervention to reduce the risk of future weight gain."

Source: ScienceDaily, 22 May 2017



DEEP SLEEP HELPS THE BRAIN LEARN

Scientists are closer to understanding why deep sleep is crucial for the brain's ability to learn efficiently.

Researchers from the University of Zurich and the Swiss Federal Institute of Technology have discovered for the first time the causal context as to why deep sleep is crucial to the learning efficiency of the brain and developed a non-invasive method for modulating deep sleep in a targeted region of the brain.

"We have developed a method that lets us reduce the sleep depth in a certain part of the brain and therefore prove the causal connection between deep sleep and learning efficiency," Reto Huber, professor at the University Children's Hospital Zurich and of Child and Adolescent Psychiatry at UZH, said in a statement.

The researchers focally perturbed deep sleep in the motor cortex, while investigating the consequences on behavioural and neurophysiological markers of neuroplasticity arising from dedicated motor practice. They discovered that the capacity to undergo neuroplastic changes is reduced by wakefulness but restored during unperturbed sleep.

According to the study, when slow waves are selectively perturbed in motor cortex, the restorative process is markedly attenuated, showing that deep sleep is a requirement for maintaining sustainable learning efficiency.

The researchers examined women and men who had to master three different motoric tasks during the study. They had their sleep manipulated at times while the researchers localised the part of the brain responsible for learning finger movements they were tasked with for the control of motor skills.

The participants performed well in the morning after a deep sleep but struggled more as the day went on. After sleeping again, the participant's efficiency increased. However, after a manipulated sleep performance, difficulties in learning the finger movements was noticeably weaker.

According to the study, there is a lack of causal evidence in humans due to the inability until now to sleep deprive one target area while keeping the natural sleep pattern intact.

"Many diseases manifest in sleep as well, such as epilepsy," Huber said. "Using the new method, we hope to be able to manipulate those specific brain regions that are directly connected with the disease."

The study was published in *Nature Communications*.

CANCERS

Occupational cancers continue to go unrecognised

Addressing the American Society of Safety Engineer's Conference in late June, Connie Muncy, senior health and safety administrator at AES Corporation, one of the world's leading power companies, said that occupational cancer is the number one cause of workplace death.

Muncy questioned why there are no efforts to try to stem the tide. She ran through a sobering list of how workers can get cancer from their workplace including exposure to 1-bromopropane, welding fumes, glyphosate, biocides, carcinogens and radiation. She also showed a list which outlined several different cancer types and their known workplace associations.

In Canada, occupational cancer has become the leading cause of compensated work-related deaths, most notably in Ontario where occupational cancer deaths surpass those of traumatic injury, two to one; Muncy said.

In Great Britain, the majority of occupational cancer cases are found in the construction industry where primary exposures are asbestos, respirable crystalline silica, solar radiation and diesel exhaust emissions.

But long term latent illnesses caused by exposure to carcinogens are difficult to relate to the workplace and are not adequately recognised and reported, said Muncy.

One reason is that many cancer cases develop decades after exposure when the worker is retired. Another reason for the notable lack of action around workplace cancer is that tens of thousands of workers generally have to die before scientific studies identify a workplace problem.

Only one percent of the 100,000 chemicals used in the workplace have been thoroughly tested for health risks, Muncy added.

Many employers also wrongfully believe that government occupational exposure levels (OELs) are helpful in reducing occupational cancer.

"There is no safe level of exposure to any carcinogens. Even the government agencies around the world that set the OELs will come right out and tell you in writing 'we don't think they are adequate and you need to do more'" said Muncy, citing NIOSH and ACGIH as examples.

"Physicians, researchers, epidemiologists, employers, government, unions and individuals all need to get on the same page and we need to look at this like the real threat that it is and not bury our heads in the sand", she said.

'Risk paradox' means cancer prevention loss

The Lancet Oncology in its May edition contains an editorial which warns that the cancer research community is giving too much attention to 'tumour biology' at the expense of efforts to prevent the tumours in the first place.

Commenting on the heavily promoted emphasis on 'precision oncology', the editorial points to the growing support for research on immunological and genetic susceptibility to cancers. "But can this insatiable desire to enhance our fundamental understanding of tumour biology overshadow the health gains that could be secured by improved environmental protection?", it questions.

"Cancer is a product of both nature and nurture, in which environmental risk is an equally crucial — and often neglected — factor because it is a multisectorial issue."

The editorial highlighting the 'cancer risk paradox' continues: "A large-scale economic inefficiency clearly exists, with financial resources being divided into both the science of cancer prevention and also into efforts to help those who have developed cancer as a direct result of human mismanagement of the planet. **To see a world in which fewer people die of cancer, both areas must be addressed."**

Warning against moves to remove environmental protections, promote polluting industries or to fail to regulate pollution effectively, the paper concludes: "To eradicate cancer, governments need to both identify and act not only on increased risk susceptibility, but also ensure that people are not exposed to carcinogenic materials through gross environmental mismanagement."

Source: Cancer Hazards, 30 May 2017

Cutting down on cancer surgeries

Engineers at the Optical Imaging Laboratory, Michigan USA, led by Caltech's Lihong Wang have developed an imaging technology that could help surgeons removing breast cancer lumps confirm that they have cut out the entire tumour -- reducing the need for additional surgeries.

About 300,000 new cases of invasive breast cancer are discovered annually. Of these, 60 to 75 percent of patients underwent breast-conserving surgery.

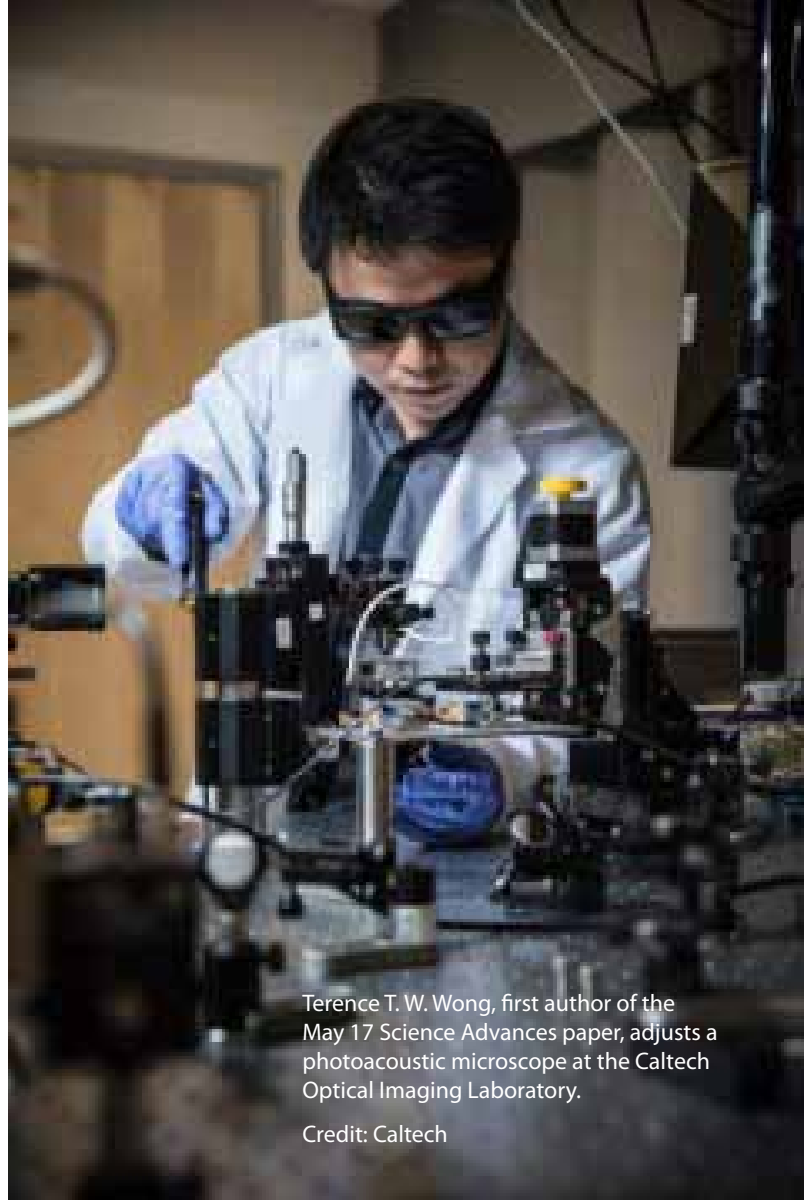
Breast-conserving surgeries, or lumpectomies, attempt to remove the entire tumour while retaining as much of the undamaged breast tissue as possible. (In contrast, a mastectomy removes the entire breast.) The extracted tissue is then sent to a lab where it is rendered into thin slices, stained with a dye to highlight key features, and then analysed. If tumour cells are found on the surface of the tissue sample, it indicates that the surgeon has cut through, not around, the tumour - meaning that a portion of the tumour remains inside the patient, who will then need a follow-up surgery to have more tissue removed.

Photoacoustic microscopy, or PAM, excites a tissue sample with a low-energy laser, which causes the tissue to vibrate. The system measures the ultrasonic waves emitted by the vibrating tissue. Because cell nuclei vibrate more strongly than surrounding material, PAM reveals the size of nuclei and the packing density of cells. Cancerous tissue tends to have larger nuclei and more densely packed cells.

Wang says that PAM's analysis time could be cut down to 10 minutes or less with the addition of faster laser pulse repetition and parallel imaging. This would make the technology useful for clinical applications.

"Potentially, we could make this tool available to surgeons within several years" says Wang.

Source: ScienceDaily 17 May 2017



Terence T. W. Wong, first author of the May 17 Science Advances paper, adjusts a photoacoustic microscope at the Caltech Optical Imaging Laboratory.

Credit: Caltech

Cancer still impacting Australia's health more than any other cause

A report released in June by the Australian Institute of Health and Welfare (AIHW) shows that cancer is the disease group with the biggest impact on our health, costing us, as a nation, more years of life than any other.

The report, *Burden of Cancer in Australia: Australian Burden of Disease Study 2011*, uses 2011 data to calculate the health impact-or 'burden'-of cancer, and shows that its impact is greater than any other group of diseases, accounting for one-fifth of the burden.

While other conditions, such as cardiovascular disease, are more common and cause a greater number of deaths, cancer results in more years of life lost due to deaths occurring in younger age groups.

The report shows five types of cancer accounted for almost half of the cancer burden: lung, bowel, breast, prostate and pancreatic cancers.

Source: AIHW, 14 June 2017

Cancer incidence in the WA mining industry

A study published in *Cancer Epidemiology* 49 (2017) has concluded that working underground has emerged as a significant determinant of lung cancer risk in our contemporary mining cohort.

Increased risk of lung, prostate, colorectal and urinary tract cancers and leukaemia were identified in miners of specific ores.

The findings underline the importance of continued surveillance of the health and exposures of this relatively young cohort of miners.

However, compared with the general population, the overall cancer incidence in miners was lower for both females and males.

Source: Cancer incidence in the Western Australian mining industry (1996-2013). Sodhi-Berry N, Reid A, Fritschi L, Musk AB, Vermeulen R, de Klerk N, Peters S.

Incidence of skin cancer in UK workers continues to rise

Although the awareness of the risk of skin cancer is increasing in the UK, the British Skin Foundation says that skin cancer is the most common form of cancer in the UK and continuing to rise.

Researchers from Imperial College London estimate that in Britain each year there are 48 deaths and 241 cases of mesothelioma skin cancers caused by exposure to ultraviolet (UV) rays from the sun at work.

Construction (44%) and agricultural (23%) workers have the highest number of deaths.

The University of Nottingham found that two-thirds of a sample of construction workers who worked outside for an average of nearly seven hours a day thought they were not at risk or were unsure if they were at risk from the sun. Clearly the message is not getting through to everyone who may be at risk, they say.

Source: Access Legal News, 29 July 2017



HAZARDOUS MATERIALS

New app maps the prevalence of asbestos in WA homes

Curtin University researchers are aiming to map the prevalence of asbestos in homes across Western Australia and help do-it-yourself (DIY) renovators identify potentially deadly risks with a free new app, released on 13 June.

Aimed at combating asbestos-related illnesses in DIY renovators and others, ACM Check, which is available on Android and Apple devices, offers a step-by-step guide to assessing the level of risk from asbestos products which your home might pose.

The app has been developed by Curtin University PhD student Matthew Govorko, under the guidance of Associate Professor Alison Reid and Professor Lin Fritschi, from the School of Public Health at Curtin University.

"This app will help home renovators gauge the level of potential risk in their homes from asbestos-containing materials, and it will be the first time that we will be able to effectively map the prevalence of asbestos products in homes across the State," Associate Professor Reid said.

"Even though asbestos cement products were phased out in WA between 1981 and 1987, it is estimated one-third of all Australian homes contain asbestos. Australia has the second highest mesothelioma death rate in the world with about 600 cases of mesothelioma diagnosed across the country each year, so it is important we do all we can to ensure more people are not exposed to this deadly product."

Mr Govorko said the app had been designed as a screening tool to identify and assess the condition of potential asbestos-containing materials in and around the home, while also offering further information for home renovators from reputable sources.

"The app guides users through a series of questions, aided by photographs, to identify the potential level of risk in and around their homes before they start to renovate," he said.

"If a material is possibly or likely to contain asbestos, the user is asked to report the current condition of the material and specify if it is likely to be disturbed during home renovations. Once they have completed the questionnaire through the app, they are offered a series of recommendations about what action to take based on the level of risk identified for each product."

ACM Check can be downloaded for free from the Apple store and Google Play.

Source: Curtin University Media Release, 13 June 2017



Major breakthrough – asbestos diseases now recognised in Indonesia

The Indonesian authorities have for the first time recognised officially the existence of asbestos disease cases in the country. Until this year, Indonesia had never formally recognised a case of asbestosis, with sufferers routinely misdiagnosed with tuberculosis. The knock-on effect was that there had not been a single successful claim for workers' compensation for work-related asbestos disease.

Indonesia is a major consumer and manufacturer of asbestos products, and is a key target for asbestos industry lobbyists, whose well-resourced campaign has targeted officials with the message that chrysotile asbestos can be used safely.

In 2015, the Local Initiative for OSH Network (LION) organised the independent medical examination of 20 workers in asbestos factories. The next step was to submit workers' compensation claims on behalf of affected workers to the state social security agency, BPJS Employment.

In what campaigners describe as a huge breakthrough, the agency has now for the first time recognised these cases as work-related asbestos disease, ruling they are eligible for compensation.

Source: TUC Risks, #800, 20 May 2017

Female lab workers at increased cancer risk

Work in chemical laboratories involves exposure to chemicals, including known or suspected carcinogens. A cohort study of 2245 female laboratory workers in Stockholm followed until 1992 showed an excess of hematolymphatic malignancies in chemical laboratories and an excess of breast cancer among women working for more than 10 years in such laboratories - the follow-up of this cohort has now been extended by 20 years.

There were 383 cases of cancer. There was a higher risk of breast cancer among those who had worked for at least 10 years in chemical laboratories, and this was especially high in women who had worked for more than 10 years in chemical labs before 1970. The researchers found no excess of breast cancer in non-chemical labs.

The Swedish researchers concluded the increased risk of breast cancer, as well as the earlier noted excess of hematolymphatic malignancies, could be related to exposure to carcinogenic chemicals/organic solvents (eg. benzene) used in chemical laboratories, especially during earlier periods.

Source: *SafetyNetJournal*, 404, 24 May 2017

UN agency rejects business case for asbestos production

A new WHO fact sheet released on 13 June at the 6th Ministerial Conference on Environment and Health in the Czech Republic makes a new call for a world-wide ban on asbestos.

The Fact Sheet notes that "all forms of asbestos including chrysotile are carcinogenic to humans. The UN agency warns that most workers world-wide affected by frequently fatal asbestos diseases have no access to compensation. It argues there is no business case for continuing asbestos use.

"There are no observable mid or long-term negative economic impacts from bans or a decline in asbestos production or consumption at the country levels, nor observable persistent negative effects at the regional level."

The Fact Sheet warns "There are substantial and increasing costs associated with the continuing production and use of asbestos. The long term negative effects far outweigh any short-term economic benefits. Substantial health costs, long term remediation and additional litigation costs further reinforce banning all uses and the production of asbestos as early as possible in favour of sustainable and healthy economic development."

Source: *TUC Risks* 804, 17 June 2017

New test to predict allergenic potency of chemicals

Researchers at Lund University in Sweden have developed a method which determines not only whether a chemical or substance is allergenic, but also how strong its potential for causing hypersensitivity is. This will aid in the establishment of so-called threshold values – or how much of a substance is safe to use in a product.

Until now, the only way of achieving similar results has been through animal testing.

"We have to deal with the fact that industrial chemicals are present and necessary in our society, as are natural substances, some of which can also make us allergic. Testing their effects on health before using them in cosmetics, paint, cleaning products and others, allows us to replace them with safer substances and thereby avoid clinical symptoms. This way you can avoid making the corrections later on", says Malin Lindstedt, professor of Immunotechnology at Lund University.

New rules in the EU will require companies to demonstrate that they have improved knowledge of up to 30 000 chemicals – without using animal testing. In addition to allergy testing these substances, the requirements include determining exactly how allergenic they are.

Malin Lindstedt and her colleagues expose human cells to various chemical substances. Using their own genetic analysis, called GARDpotency, they are able to determine how the cells of the body's immune system react: a strong allergic reaction, weak, or none at all.

"We have identified 52 biomarkers which can predict how potent an allergenic substance actually is. Based on how the genetic expression changes after exposure to the substance, we are able to make a comprehensive assessment. This predicts the strength with high accuracy", says Malin Lindstedt.

The test is already being used to a limited extent. However, it has not yet been validated by the OECD, which is necessary for chemical producers to roll it out fully.

Food additives are the next area that Malin Lindstedt wants to examine more closely. According to her, we know far too little about whether additives affect genetic regulation in our immune cells.

Source: *Chemwatch* 19 June 2017



Visitors view photographs of Minamata disease victims displayed at the Minamata Tokyo Exhibition in 1996 (Timothy S. George)

MINAMATA CONVENTION ON MERCURY

In May 1956 mercury waste product from a fertiliser manufacturing plant was dumped in Minamata Bay, Japan, resulting in the deaths of 900 people, as well as local bird life and domestic animals. Victims who recovered, as well as members of their families, were often socially ostracized. Around 2,265 people were certified as having directly suffered from mercury poisoning.

Some 50 years later, the first meeting of the Conference of the Parties to the Minamata Convention on Mercury will take place from 24-29 September 2017 in Geneva, Switzerland to celebrate the commitment of the international community to the Minamata Convention.

Over the past 20 years the EU has developed a comprehensive body of legislation covering all aspects of the mercury lifestyle, from primary mining to waste disposal, including measures on trade, products containing mercury and mercury pollution.

The Minamata Convention will not only tighten environmental standards worldwide, but also help create a level playing-field, as all major economies will apply environmental requirements similar to those already in force in the European Union.

Pregnant women, infants and children are at particular risk from mercury in the food-chain, and the Convention will bring about significant decreases to their exposure in the long term, for example by prohibiting the use of dental amalgam for these vulnerable categories.

Source: *Environmental Expert*, 25 May 2017

Banned chemicals (PBDE's) pass through umbilical cord from mother to baby

Trace amounts of flame retardants, banned in the U.S. for more than a decade, are still being passed through umbilical cord blood from mothers to their babies, according to new Indiana University research. The chemicals are linked to health concerns including hormone disruption and low birth weight.

PBDEs, or polybrominated diphenyl ethers, were commonly used flame retardants in building materials, electronics and textiles until they were banned in 2004. The chemicals leach into the environment, where they persist and are found today in virtually every population worldwide.

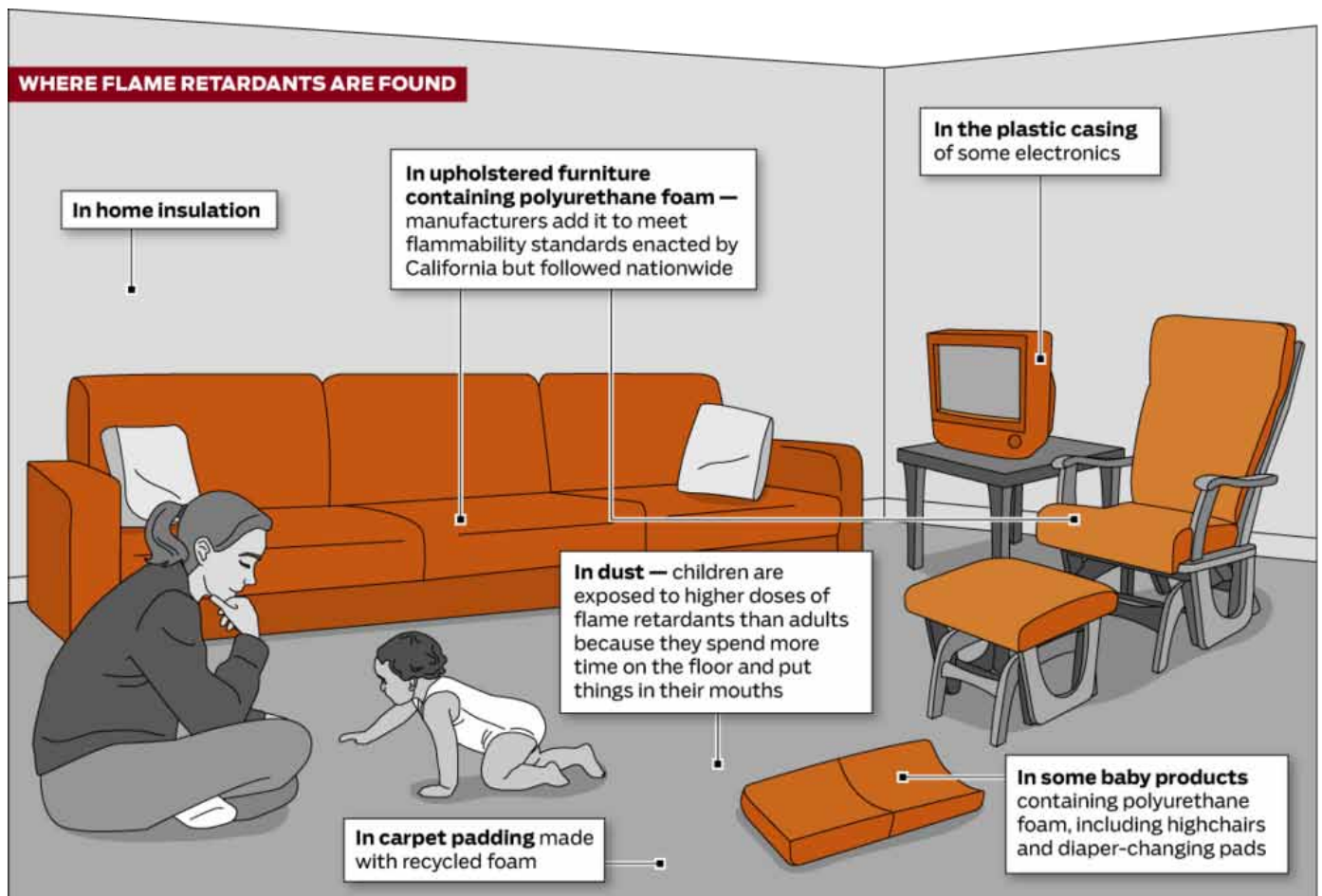
The research, conducted by a team of scientists including Amina Salamova of the IU School of the Public and Environmental Affairs, is believed to be among the few in the U.S. to detect the presence of PBDEs in samples drawn from matched mother-infant umbilical cord blood.

"What is especially concerning is that we found consistently higher levels of PBDEs in the infant of each mother-infant pair, suggesting the babies have higher circulating concentrations of these potentially neurotoxic and endocrine-disrupting chemicals compared with their mothers," Salamova said.

The researchers found especially high levels of the chemical BDE-47 in infant blood. That's consistent with other studies and could be the result of its use until 2004 by manufacturers of sofas, mattresses and other foam-filled household products that are still in many homes today.

Salamova added "Long-term follow-up studies of newborns are essential to determine if there are differences in health based on PBDE levels. These findings underscore the importance of families reducing the sources of dangerous flame retardants in their homes because, over time, what's in a house can end up in a mother's body."

Source: ScienceDaily, 1 July 2017



SOURCES: EPA, Tribune reporting

KATIE NIELAND/TRIBUNE

NEW CASES OF SILICOSIS CAUSE CONCERN

A NSW parliamentary inquiry was told in July that workers are now being diagnosed with potentially life-threatening silicosis, linked to newer engineered stone products being increasingly used for kitchen and bathroom benchtops.

The Medical Journal of Australia commented in an article in June that “in almost all reported cases, there was little adherence to basic protection measures, such as provision of appropriate ventilation systems and use of personal protective equipment.”

There has been an average of nine cases of silicosis each year officially reported in NSW since 2011/12. However this data is limited to workers who have applied for compensation.

Source: Sydney Morning Herald, 2 July 2017



Above: Chris Parmangos was about 15 years into his job as a labourer in Sydney when he was diagnosed with lung disease from exposure to silica dust. Photo: Lindsay Moller

Mesothelioma – new drug to be trialled in UK

Researchers at the Universities of Southampton and Leicester are trialling a new drug, Nivolumab, a drug already used to successfully treat advanced melanoma, and advanced kidney cancer, to see if it can also be used to target mesothelioma.

Co-Chief investigator, Professor Gareth Griffiths, said “The UK has one of the world’s highest incidences of mesothelioma and currently there aren’t many ways to treat it. Boosting the immune system by releasing killer T cells that have previously been blocked could offer us a new way to treat more patients with this devastating disease.

The trial will recruit 304 patients who have relapsed mesothelioma across 20 UK-wide sites and aims to assess the true benefit of nivolumab for patients with relapsed mesothelioma in a setting where there is an unmet need.

Source: Chemwatch, 9 June 2017

A WORD ABOUT THE SOCIETY

At the last Society seminar in West Perth, I reflected on being in my thirties when the Society began, and how encouraging it was to see so many younger people at the seminar, with a now nearly equal mix of women and men.

The eighth of August this year will mark forty years since the first meeting of the Occupational Health Society. I had suggested the idea of such a group to the Director of the then Government Chemical Laboratories the previous year, having seen how the Forensic Science Society had brought a range of interested people together in this state to advance forensic science. My first involvement in occupational health related work for the government was in 1968.

Geoff Ebell and I from the Labs met with an occupational hygienist recently appointed to the Public Health Department from East Africa, Gerry Coles, and together with Dr Alan Cumpston we formed the first executive of the society. From memory we had a committee member from the Mines Department, one from the Labour Department and one from private industry. We also attracted people from the then Trades and Labour Council to our meetings.

The Victorians, such as Tony Morgan of Telecom and Leo Ruschena of the SEC decided to set up a branch there, and because the two branches rotated the federal presidency, for about a year I was also federal president. Moves to do the same in NSW resulted in a different grouping, the Australian Institute of Occupational Hygienists.

In 1978 while studying occupational hygiene in Sydney, I had heard of the US OSH Act and of the US NIOSH, as well as the Robens style OHS legislation in the UK. So I became interested in the idea of bringing the three departments in WA concerned with OSH together, and wrote a letter to The West to this effect. In the meantime, I had obtained copies of the acts which applied the UK Robens principles in Saskatchewan and Ontario, because Canada's province structure was similar to our states. Odd though it may be, I am not sure how many here knew that South Australia had introduced Robens style OHS laws in 1972, two years before the UK.

At that time we had a Factories and Shops Act, a Construction Act and a Machinery Safety Act, with three inspectorates at the Department of Labour, a Mine Safety Act, a Coal Mine Safety Act and a Dangerous Goods Act all with their inspectorates at the Department of Mines, and a Health Act and



Poisons Act with inspectors at the Department of Public Health. Oil and gas was regulated by a ministerial directive requiring "good oilfield practice".

In August 1980 with four speakers, the Society held a debate on new legislation and a common department for OHS.

At some point after that Judyth Watson, who I think by then had been elected an ALP MP, asked to borrow the Canadian legislation, there was a seminar on modernising OHS held by the ALP in 1972, and in 1983 the ALP won government. By 1984 it had passed the Occupational Health Safety and Welfare Act.

WA Senator Pat Giles was an early speaker at the Society. The Society also tried to persuade every appropriate interstate and international visitor to speak at a Society meeting. We had ergonomist Prof. Asa Kilbom from Sweden, Henry Walton from the UK Institute of Occupational Medicine, Vernon Timbrell from the UK Pneumoconiosis Research Unit (the asbestos guru), Dr Bill Glass from NZ, Gersh Major, Tony Findlay and Alan Rogers from the School of Public Health and Tropical Medicine in Sydney, Bertram Dinman chief occupational health physician for Alcoa, and with probably the most horrific slides, a UK investigator of the 28 fatalities at the Flixborough plant due to a cyclohexane explosion.

The Society has had two restarts, one under Dr KC Wan and the other under Pat Gilroy and Joe Maglizza. It continues to play a valuable role in OHS in this state, such as detailed independent comment on the proposed WHS regulations, and Australian environmental particulate standards.

So I encourage younger people to get involved and make sure the Society continues to thrive.

Geoff Taylor



Occupational Health Society of Australia (WA)



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

\$50 ordinary membership

\$20 student membership.

Simply email safety@marcsta.com 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.

Visit www.ohswa.marcsta.com for more information.



Occupational Health Society of Australia (WA)

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