the **monitor**

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

Issue 2 Vol 19 May 2015

Occupational Health

Symposium to discuss the major health related initiatives in the Work Health and Safety Bill 2014

Wednesday, 15 July 2015, 8:30 am - 3:00 pm

Technology Park, Bentley, WA

The Occupational Health Society of Australia (WA) will conduct a major symposium on Wednesday, 15 July 2015, to provide all concerned occupational health professionals with the opportunity to hear a range of eminent speakers explain the justification and purpose of new legislative initiatives to protect the physical and mental health of West Australian workers.

Topics for discussion will include:

- Understanding the terminology and intent of the health related initiatives.
- The role of the Occupational Health Physician in assessing and monitoring the health of workers.
- The duty to monitor the psychological health of workers and the practicability of compliance.
- Keeping regulations current: the evolving evidence of the causes of occupational diseases.

Who should attend? Managers, supervisors, nurses, health care professionals, aviation and law enforcement officers, other interested occupational health professionals.

See page 26 for the list of speakers, cost and registration form.

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Legislative/regulatory matters

Mining and petroleum legislation

The Final Report of the consultant employed to gather input from stakeholders on the future structure of regulation for the mining and petroleum industries in Western Australia has been released and, while the consultant's recommendations are no surprise – he simply did what the Department wanted him to do – it will be disappointing for those organisations and associations who took the time to respond.

All of the major industry bodies and the major union concerned expressed a preference for retention of the status quo, that is, a continuation of separate acts for what are different industry sectors, and their views have been disregarded.

The other disappointment was the failure to take account of the main objective of the legislation which is to secure the health and safety of workers and workplaces.

This aspect was ignored in favour of what best suited the regulator.

The report is not one for the shelf but rather the shredder.

Approved new NSW codes of practice in mining workplaces

New codes developed under the National Mine Safety Framework and Tristate Legislation Working Group have been published on the NSW Mine Safety website.

Inspectors may refer to an approved code of practice when issuing an improvement or prohibition notice.

The codes are:

- Safety Management Systems
 in Mines
- Emergency Planning for Mines
- Inundation and Inrush Hazard
 Management
- Strata Control in Underground Mines
- Roadway Dust Analysis in Underground Coal Mines

These codes may eventually be adopted in Western Australia.

Source: Mine Safety News, 17 February 2015

Bullying in the workplace still a major concern

The head of the Fair Work Commission's anti-bullying panel, Commissioner Peter Hampton, recently highlighted the key cases in the new jurisdiction's first year, revealing that many employers fail to follow their own internal procedures when dealing with bullying complaints.

Of the 701 anti-bullying applications made to the Commission in 2014, 593 dealt with behaviour that had been reported to the employer. In 442 of these applications, the employer said they had a policy on bullying, or a dispute resolution procedure, yet employers in only 132 of the cases indicated that they had followed their internal policies.

Source: OHS Reps SafetyNetJournal, 314, 26 March 2015

Weakening of UK laws for the mining industry – a cause for concern

The erosion of mine safety regulation in the UK is causing concern for the union movement and follows a similar trend in general industry.

From April, mine operators will only be required to have "adequate rescue cover" for underground operations and the union claims that what represents "adequate" will only be tested after a potentially deadly incident. Also, reports alerting the mine safety regulators to potentially deadly situations will now only be passed on if "at least two of the investigating team decide there is imminent danger." A major concern is the removal of a requirement that mine managers have relevant qualifications.

Union safety experts warn that a combination of less vigilant safety practices, a lighter regulatory touch and reduced trade union involvement in safety will result in more fatalities and serious injuries.

Among the demands of the movement Hazards Campaign is a call on the incoming government – yet to be elected – to bury the myth that life-saving regulation is a burden on business. The campaign argues that it is mismanagement and negligence that is harmful – to both the workforce and the economy.

Source: TUC Risks, #697, 11 April 2015

Failure to monitor health of workers results in prosecution

For failing to carry out regular health checks of employees to detect any symptoms of dermatitis or other skin issues, the Royal Cornwall Hospital's NHS Trust (UK) was fined £10,000 and ordered to pay costs of £9,620 for a criminal breach of the Management of Health and Safety at Work Regulations.

Between 2007 and 2012 there were 23 cases of dermatitis among staff. As and when symptoms were reported by members of staff, they were simply told to see their GP by the Trust's occupational health team. Despite the known risk, there was limited information for staff about reducing it with simple and effective methods such as drying hands properly and regularly applying moisturiser.

Source: TUC Risks, 693, 7 March 2015

Revised Model Code of Practice – First Aid in the Workplace

SafeWork Australia has revised and republished the Model Code of Practice – First Aid in the Workplace.

As with all model codes it will require approval in respective state jurisdictions.

Source: SafeWork Australia, 20 April 2015

WorkSafe launches a new small business safety website

WorkSafe WA has launched the Small Business Safety website (www.commerce.wa.gov.au/ worksafe/small-business-safety) to help small businesses comply with their workplace safety and health obligations.

A questionnaire has been provided covering a range of work safety issues employers need to address in order to comply with occupational safety and health legislation.

It is a most useful tool for small employers who may not be aware of their legislative requirements.

Commissioner Lex McCulloch says that "research has shown that many small businesses do not know where to start in ensuring their workplaces are safe, and this website will make it much easier for them to begin the process."

Source: SafetySolutions, 19 March 2015





Red alert on false workplace competency documentation

WorkSafe WA has issued warnings to employers to carefully scrutinise high risk work licences and statements of attainment for tilt-up construction work.

Acting Executive Director, Ian Munns, has advised that these documents were being fraudulently electronically created and advised employers to check that employees have had the necessary work experience they claim to have.

The consequences of employing persons who do not have the required training and work experience can be life threatening in busy workplaces.

Source: Department of Commerce, Media Release, April 2015

Excessive overtime linked to workplace deaths

In China the All-China Federation of Trade Unions – never distinguished for its advocacy protecting workers – has taken the unusual step of publicly criticising Foxconn, the largest private employer in China employing 1.2 million workers, for excessive overtime at its massive electronics factories.

In an open letter response in February, Foxconn claimed that "there is no relationship between constant overtime and incidents of death from overwork or suicide" and referred to its infamous 2010 serial suicides (18 Foxconn workers attempted suicide, resulting in 14 deaths) as "unfortunate incidents with a few individual workers."

Reports by a "Focusing on New Generation Migrant Workers" research group found that Foxconn's overtime exceeds the 36 hour maximum specified in China's labour law. One worker reported that during the busy season he worked over 140 hours of overtime per month for several months in a row.

While Foxconn may deny it, it's clear that its excessive overtime, low base wage, and the sense by the worker of always striving to make enough and never making enough to go anywhere are factors in the frequency of deaths, say the researchers.

Source: LaborNotes, 5 February 2015

UK WARNING ON DODGY PPE

Counterfeit and inferior personal protective equipment is finding its way into UK workplaces according to a major supplier.

The fact that to the untrained eye, many of these products still look the part often makes it difficult to spot that they are fake.

The managing director of Slingsby, one of the UK's market leaders in sales of industrial and commercial equipment, says that this means it is important to buy PPE from reputable suppliers and to ensure that the equipment is certified to the appropriate standard.

Source: TUC Risks, #691, 21 February 2015

Psychosocial risk factors linked to work accidents

A major French study of more than 40,000 workers has found some psychosocial risk factors are significantly associated with work accidents and injuries.

The study identified an association between workplace verbal abuse and low job predictability and occupational injuries for both men and women.

Men who reported low reward (such as job promotion or security), physical violence and bullying were found more likely to be involved in work-related incidents.

Women with low decision latitude (skill discretion and decision authority) were more likely to take a longer time off work because of injury, and high psychological demands were related to women both suffering injuries and taking longer absences.

Researchers said that "this study adds to the body of evidence that psychosocial work environment should be a target for the prevention of occupational accidents and the improvement of health at work."

Source: Allaine Coleman

Risk taking and rule breaking in Australian workplaces



SafeWork Australia has released a report "Attitudes towards risk taking and rule breaking in Australian workplaces" which summarises the findings from the Perceptions of Work Health and Safety Survey 2012 of attitudes towards risk taking and rule breaking amongst Australian workers.

The report presents this information with regard to worker type, business/workplace size, occupation and industry. It identifies where workers are doing well and where workers are potentially putting themselves at risk in the workplace.

It is a valuable resource for safety professionals.

Source: SafeWork Australia, December 2014

Health and safety hazards in the manufacturing industry

SafeWork Australia has published a review of the manufacturing industry that found the most common self-reported exposures in that industry were exposures to airborne hazards, noise and vibration.

While most workers are provided with some types of control, about one in seven workers were not provided with any control measures for these hazards.

The review concluded that, despite the high rate of work-related injury and illness, the industry appears to be doing well in terms of general work health and safety activities. However, targets for improvement were the inclusion of contractors in health and safety induction training, and addressing bullying and fatigue.

Source: WorkCover, Queensland, 28 April 2015

AIR POLLUTION

New French study shows deadly effects of particulate matter pollution

In a French study of short-term impacts of particulate matter on mortality in nine French cities, researchers looked at changes in daily death rates following a rise of $10 \ \mu g/m^3$ for each of the three sizes of PM (PM₁₀, PM_{2.5} and PM_{10-2.5}). Data for pollution and mortality in these cities were assessed for the period 2000-2006. A total of 548,474 died in the nine cities during this period.

The results suggested a significant link between increases in particulate matter and deaths from all non-accidental causes: an increase of 0.8% in mortality in response to a $10 \,\mu\text{g/m}^3$ rise in PM₁₀. For PM_{2.5}, death rates rose by 0.7% following a 10 $\mu\text{g/m}^3$ rise.

PM_{10-2.5} had a particularly strong effect on cardiovascular and cardiac mortality, and particularly for the elderly. It was associated with a 3.9% rise in deaths from cardiovascular disease and a 4.4% rise in deaths from cardiac problems for people older than 74 years old.

Source: Science for the Environment Policy, Issue 397, December 2014

Exercise can outweigh harmful effects of air pollution

New research carried out by the University of Copenhagen has found that air pollution should not be perceived as a barrier to exercising in urban areas.

The study, published in the journal Environmental Health Perspectives, argues that the beneficial effects of exercise are more important to good health than the negative effects of air pollution with regards to premature mortality.

Lead author Zorana Jovanovic said that "even for those living in the most polluted areas of Copenhagen, it is healthier to go for a run, a walk or to cycle to work than it is to stay inactive."

Air pollution and autism spectrum syndrome

Autism spectrum disorder (ASD) is a developmental disorder with increasing prevalence worldwide, yet has unclear etiology (manner of causation).

Research published in Environmental Health Perspectives in March has found the possibility of an effect of maternal exposure to air pollution during pregnancy, and especially during the third trimester, on the development of ASD in children.

The results suggest that air pollution is a modifiable risk factor for autism, and reduced exposure during pregnancy could lead to lower incidence of ASD and reduce the substantial increasing economic burden of ASD on families and society.

Source: Environmental Health Perspectives, Vol 123, 3, March 2015

UK government rejects call for higher diesel tax

In the UK in December 2014, a parliamentary Environmental Audit Committee published a report on air quality in which it called for a less favourable tax regime for diesel vehicles to discourage the emission of pollutants.

It also urged the government to introduce without delay a national framework for low emission zones and a certification scheme for vehicles that meet particular air quality standards.

The Government responded on 1st March saying it had no plans to change vehicle excise duty and fuel duty had been frozen for the remainder of the parliamentary term which ends this year.

Diesel was once considered more environmentally friendly than petrol because it produces less carbon dioxide, but recent surveys have suggested that it is more harmful for the health because of the pollutants emitted by diesel engines.

The IARC classifies diesel engine exhaust as carcinogenic to humans.

Source: Reuters, 28 February 2015



THE EUROPEAN ENVIRONMENT STATE AND OUTLOOK 2015

Europe's Environment 2015 – Health and Wellbeing

An analysis of Europe's environment and climate policies by the European Environment Agency has found health and wellbeing improvements in drinking and bathing water quality and some reduction in exposure to key hazardous pollutants.

However, there were also some negative findings:

- Air and noise pollution continue to cause serious health impacts in urban areas.
- In 2011 about 430,000 premature deaths in the European Union were attributed to fine particulate matter while noise exposure contributes to at least 10,000 premature deaths due to heart diseases each year.
- The growing use of chemicals, particularly in consumer products, has been associated with an observed increase of endocrine diseases and disorders in humans.
- Projected improvements in air quality are not expected to be sufficient to prevent continuing harm, while impacts resulting from climate change are expected to worsen.

Diesel pollution and respiratory distress linked

Researchers in the UK have, for the first time, shown how exhaust pollution from diesel engines is able to affect nerves within the lung. Air pollution is a significant threat to health, they say, and identifying potential mechanisms linking exposure to diesel exhaust and the exacerbation of respiratory diseases may lead to treatments for those affected.

Researchers say that their research is only a first step towards understanding how air pollution may be affecting airway sensory nerves and respiratory reflexes.

Source: ScienceDaily, 14 March 2015

Source: Europa Media Release, 30 March 2015

Mounting international evidence of the health effects of air pollution

Air pollution is both linked to a higher risk of suffering a stroke and also associated with anxiety according to two studies published in the *British Medical Journal* in March.

University of Edinburgh research funded by the British Heart Foundation looked at the association between short term air pollution exposure and stroke-related hospital admissions and deaths, analysing six million strokes in 28 countries around the world.

The analysis found an association between strokes and carbon monoxide, sulfur dioxide, nitrogen dioxide and particulate matter PM_{10} and $PM_{2.5}$, while the weakest association was with ozone.

Meanwhile, a second BMJ study by researchers at Johns Hopkins and Harvard universities in the USA found a "significant" association between particulate matter PM_{2.5} and a higher risk of anxiety, based on a study of 71,271 women aged between 57 and 85 years.

The stroke research follows another study in Germany by the Institute for Diabetes Research at the Helmholtz Centre, which linked high levels of particulate dust pollution with type 1 diabetes in children.

Chief executive of the British Heart Foundation, Simon Gillespie, said "This new research only compounds what we already know, that air pollution is a blight on public health."

Air pollution shortening life spans in India

According to research published in late February, India's contaminated air is cutting the lives of 660 million people by about three years, underlying the hidden costs of the country's heavy reliance on fossil fuels to power economic growth.

There are now 13 Indian cities on the World Health Organization's list of the 20 most polluted.

India has no regulations for pollutants like sulfur dioxide or mercury emissions while fuel standards remain far below Western norms and existing regulations are often ignored.

Source: Environmental-expert, 23 February 2015



Source: Air Quality News, 27 March 2015

air POLLUTION Stopping at red lights can be unhealthy

According to new research, you're dosing yourself with high levels of harmful air pollution every time you stop at a red light. Braking at traffic lights, and then accelerating when they turn green, makes up only around 2 per cent of the time a driver spends in the car. Yet that scant amount of time makes up fully 25 per cent of a driver's total air pollution exposure.

The concentration of pollution particles in these moments are as much as 29 times higher than concentrations seen while the car is simply cruising, the study found.

The solution according to lead author Prashant Kumar is to keep car windows shut and fans off, since they suck in outdoor air. Also increase the distance between your vehicle and the one in front to reduce the amount of exhaust in your airspace.

Source: Healthy Living, 16 February 2015

Poor air quality caused 4,000 extra healthcare visits in the UK

Real time monitoring of public health during two periods of high air pollution in the UK in 2014 showed that there were an estimated 3,500 extra healthcare visits for acute respiratory systems and approximately 500 for severe asthma during those periods. The results of this research demonstrate the value of such 'syndromic surveillance' systems for exploring air quality's effects on human health.

The study focused on data for respiratory systems affected by air pollution, including breathlessness, wheeze and severe asthma.

Source: Science for Environment Policy, 406, 5 March 2015

AIR POLLUTANTS COULD BOOST POTENCY OF COMMON AIRBORNE ALLERGENS

A pair of air pollutants linked to climate change – nitrogen dioxide and ground-level ozone – appear to provoke chemical changes in certain airborne allergens that could increase their potency. That, in combination with changes in global climate, could help explain why allergies are becoming more common.

Dr Ulrich Pöschi of the Max Planck Institute in Germany says that scientists have long suspected that air pollution and climate change are involved in the increasing prevalence of allergies worldwide, but understanding the underlying chemical processes behind this phenomenon has proven elusive.

The findings were presented on 22 March at the National Meeting and Exposition of the American Chemical Society.

Source: ScienceDaily, 22 March 2015

Air pollution linked to high risk of suicide

A new study from the University of Utah is adding to the small but growing body of research that links air pollution exposure to suicide.

The study examines how chemical and meteorological variables are risk factors for suicide and how these factors play out among different genders and age groups.

Researchers found an increased risk of suicide associated with short-term exposure to nitrogen dioxide and fine particulate matter among Salt Lake City residents who died by suicide between 2000 and 2010. In particular, men and Salt Lake residents between 36 to 64 years of age experienced the highest risk of suicide following short term pollution exposure.

Source: ScienceDaily, 12 February 2015



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HEALTH - PHYSICAL

Medications used to treat diabetes may trigger heart failure

A comprehensive study examining clinical trials of more than 95,000 patients has found that glucose or sugar-lowering medications prescribed to patients with diabetes may pose an increased risk for the development of heart failure in these patients.

Overall, the study found that for every one kilogram of weight gain attributed to a sugar-lowering diabetes medication or strategy, there was an associated seven per cent increased risk of heart failure directly linked to that medication or strategy.

Heart failure is a common occurrence for patients with type 2 diabetes and has a major impact on one's life expectancy and quality of life as well as representing a major driver of healthcare costs.

Source: 1. ScienceDaily, 16 March 2015; Source 2: Varas-Lorenzo et al. BMC Cardiovascular Disorders 201http://www.biomedcentral.com/1471-2261/14/129

Type 2 diabetes linked to certain cognitive abilities

Type 2 diabetes is associated with worse performance on cognitive tests measuring abilities involved in the control of emotions, behaviours and thought, says a new study from the University of Waterloo, Ontario.

It is the first comprehensive statistical summary of studies linking type 2 diabetes and a reduction of certain cognitive abilities, known as executive functions.

Executive functions inhibit habitual thinking patterns, knee-jerk emotional reactions and reflective behaviours such as making impulse purchases or automatically following social cues.

Source: ScienceDaily, 13 February 2015

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Carpal tunnel syndrome linked to migraine headaches

Patients with carpal tunnel syndrome are more than twice as likely to have migraine headaches reports a new study. Patients with the complaint have symptoms such as hand numbness and weakness resulting from pressure on the median nerve in the wrist.

The findings add a new piece of evidence in the ongoing debate over the use of nerve decompression surgery as a treatment for migraine headaches.

Source: ScienceDaily, 23 March 2015



Licorice extract protects the skin from UV-induced stress

New research published in the January issue of *Experimental Dermatology* introduces a new plant-derived agent which protects skin from the harmful effects of ultra violet radiation.

Researchers found that the antioxidant active Licochalcone A, which is the main component of the root extract of the plant Chinese Licorice, is able to protect the skin from subsequent UV radiation damage from within by strengthening the skin's own defence systems. Skin cells pretreated with Licochalcone A produced a higher amount of 'self-protecting', antioxidant molecules.

These findings show that the skin's own defence system can be stimulated by the application of licorice extract. In combination with UV filters, this approach might therefore provide superior sun protection by not only offering physical but also biological sun protection say the researchers.

Source: Chemwatch Bulletin, 30 March 2015

MAGNETIC NANOPARTICLES COULD STOP BLOOD-CLOT-CAUSED STROKES

By loading magnetic nanoparticles with drugs and dressing them in biochemical camouflage, researchers at the Houston Methodist Research Institute say they can destroy blood clots 100 to 1,000 times faster than a commonly used clot-busting technique.

Co-author and cardiovascular surgeon, Alan Lumsden, said that the nanoparticle protects the drug from the body's defences, giving the clot busting drug (tPA) time to work. It also means less of the tPA needs to be used which could make haemorrhage less likely.

Although the findings were based on experiments in human blood and mouse clotting models, the researchers are excited to see if the technique works as phenomenally well for their patients as what they saw in the experiments.



Source: ScienceDaily, 23 February 2015

PIC: Each nanoparticle is composed of an iron oxide core (red squares) that is swathed in albumin (grey) and the anti-clotting agent tPA (Green). The iron oxide cubes are about 20 nm on a side. Credit: Paolo Decuzzi Laboratory

Using nanotechnology for therapeutic applications

Drug delivery is one of the main applications of nanomedicine, because you can change the distribution of drugs in the body and you can target the drugs to the specific sites that they need to go to.

This means you can use reduced concentrations of the drug to achieve more powerful results with no side effects.

For example, the use of nitric oxide to treat raised blood pressure in the liver which is a leading cause of death in patients with cirrhosis, but it cannot be given in an untargeted fashion because of side effects.

Stellate cells are neurons with several dendrites radiating from the cell body, giving them a star shape. Stellate cells carry a large number of surface receptors for Vitamin A, so the researchers coated the nanoparticles with Vitamin A and filled them with nitric oxide.

The idea was that the Vitamin A coating would attract the nanoparticles to the stellate cells, and then nitric oxide would only be released inside those cells.

In laboratory tests, the nano particles achieved double the reduction in liver venous pressure compared with conventional drugs.

The hope now is to test this approach in clinical trials on humans.

Source: Monash Institute of Pharmaceutical Sciences, Australian Research Council Centre of Excellence in Convergent Bio-Nano Science and Technology

Unacceptable level of violence and aggression in the nursing discipline

A recent survey of all members of the Australian Nursing and Midwifery Federation has found that a disturbingly high number of respondentsalmost 70 per cent - were subjected to violence or aggression in the workplace.

Common examples cited by healthcare workers included being punched, strangled and kicked. The survey of almost 5,000 nurses and midwives found patients and their relations were the most common perpetrators but, in some cases, colleagues and supervisors were responsible.

In Western Australia the average workers' compensation premiums for hospitals and nursing homes is approximately double of that applying in the mining sector.

Source: OHS Reps, SafetyNetJournal, #318

Australian Government Australian Institute of Health and Welfare

Cardiovascular disease, diabetes and chronic kidney disease **Australian facts**

provident disease, diabetes and chronic kidney disease—Australian facts is a of 5 reports by the National Centre for Monitoring Vascular Diseases at the Australian te of Health and Welfare that describe the combined burden of cardiovascular disease diabetes and chronic kidney disease (CKO). eport on *Risk factors* presents the latest statistics on the behaviours and cteristics that increase the likelihood of a person developing these chronic ses. It also describes risk factors among people who already have CVD, diabetes D. It examines age and sex characteristics and variations across population

Risk factors

cardiovas**c**ular dis

Cardiovascular disease, diabetes and chronic kidney disease - risk factors common among Australians

A new report from the Australian Institute of Health and Welfare shows that two in three Australian adults have at least three or more risk factors associated with cardiovascular disease, diabetes or chronic kidney disease.

Risk factors are behaviours or characteristics that increase the likelihood of developing a particular disease and people with more than one risk factor are at greater risk says AIHW spokesperson Sushma Mathur.

The risk of developing cardiovascular disease, diabetes or chronic kidney disease is closely associated with smoking, physical inactivity, poor nutrition and the harmful use of alcohol, which in turn contribute to overweight and obesity, high blood pressure and high blood cholesterol levels.

Generally, men, people living in outer regional and remote areas and people in low socio-economic groups had higher rates of risk factors.

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Chronic Obstructive Pulmonary Disease (COPD) is a serious, progressive and disabling condition that limits airflow in the lungs. It includes emphysema and chronic bronchitis.

The latest statistics from the Australian Institute of Health and Welfare show that more than one in 20 Australians aged 55 and over (310,700 people) have COPD. In 2012 it was the fifth leading cause of death. In 2012-13 almost 60,000 people aged 55-or-over were hospitalised.

That's a rate of 1,052 per 100,000 population aged 55 or over.

Source: AIHW Media Release January 2015



More than 1 in 20 Australians aged 55 and over have COPD (5.7%). That's 310,700 people.

Source: AIHW Media Release, 25 March 2015

New score predicts heart disease and stroke risk for those aged over 40

For the first time, scientists have developed a new risk score (Globorisk) that can predict the 10 year risk of developing heart disease or having a stroke in persons aged 40 years or older in any country. Globorisk measures cardiovascular risk in individuals aged 40 or older by factoring in the person's smoking status, blood pressure, diabetes status and total cholesterol level, while adjusting for the effects of sex and age on cardiovascular disease between countries.

Dr Goodarz Danaei, Assistant Professor of Global Health of Harvard's T H Chan School of Public Health and his colleagues have developed, validated and evaluated Globorisk using data from eight cohort studies including more than 50,000 participants. Globorisk can be updated to fit local conditions and risk factor levels in different countries using routinely available information.

According to Dr Danaei "Globorisk can be used to identify individuals at high risk of developing cardiovascular disease who are most likely to benefit from lifestyle changes or preventive drug treatment. Moreover, by estimating the number of people who have a high risk in any given country we have more chance of accurately measuring progress towards the WHO target of 50% coverage of multi-drug treatment and counselling for people aged 40 years and older at high risk of cardiovascular disease."

Source: The Lancet Diabetes and Endocrinology, News Release, 25 March 2015

Body Mass Index and dementia – the latest research

According to new research published in the Lancet Diabetes and Endocrinology Journal, middle agedpeople with a Body Mass Index (BMI = body weight in kgs divided by height in metres squared) less than 20 kg/m² – underweight - are a third more likely to develop dementia than people of similar age with a healthy BMI.

The findings, which come from the largest ever study to examine the statistical association between BMI and dementia, also show that middle-aged obese people (BMI greater than 30kg/m²) are nearly 30% less likely to develop dementia than people of a healthy weight, contradicting findings from some previous research, which suggested that obesity leads to an increased risk of dementia.



ls chronic fatigue syndrome a biological illness?

Researchers at Columbia University's School of Public Health have identified distinct immune changes in patients diagnosed with chronic fatigue syndrome. The findings could help improve diagnosis and identify treatment options for the disabling disorder, in which symptoms range from extreme fatigue and difficulty concentrating, to headaches and muscle pain.

These immune signatures represent the first robust physical evidence that chronic fatigue syndrome is a biological illness as opposed to a psychological disorder, and the first evidence that the disease has distinct stages.

Source: ScienceDaily, 27 February 2015

SHORTER HEIGHT LINKED TO INCREASED RISK OF CORONARY HEART DISEASE

Researchers from the University of Leicester UK have discovered that every 2.5 inches (6.35 cms) change in your height affected the risk of coronary heart disease by 13.5%. For example, compared to a 5ft 6inch (1.68m) tall person, a 5ft (1.52 m) tall person on average has a 32% higher risk of coronary heart disease because of their relatively shorter stature.

Professor Jeremy Pearson, Associate Medical Director at the British Heart Foundation, said: "By using the power of very large scale genetic studies, this research is the first to show that the known association between increased height and a lower risk of coronary heart disease is at least in part due to genetics, rather than purely down to nutrition or lifestyle factors. The team has identified several ways that naturally occurring gene variations can control both a person's height and their risk of coronary heart disease. Further exploration of these genes may suggest new ways to reduce the risk of heart and circulatory diseases."

Enriched broccoli reduces cholesterol

Including a new broccoli variety in your diet reduces blood LDL (the 'bad' cholesterol) levels by around six per cent, according to the results of human trials conducted by the UK Institute of Food Research.

The new variety available in British supermarkets under the name "Beneforte" was bred to contain two to three times more of a naturally occurring compound, glucoraphanin.

Glucoraphanin is converted in the body to sulphoraphane, which turns on specific genes that activate our bodies' defences against sugar and fat conversion, rebalancing metabolism away from the production of LDL cholesterol.

Source: ScienceDaily, 8 April 2015





THE UNIVERSITY OF Western Australia



WANTED:

200 pregnant FIFO workers 200 pregnant wives/girlfriends of FIFO workers Answer health questions – online survey Be part of the change you want to see

The University of Western Australia is conducting a confidential, online FIFO pregnancy study for pregnant women over 18 years of age.

Fly-In Fly-Out employment is a significant way of life in Australia and elsewhere in the world. There is no research about pregnancy and FIFO. To provide quality health care we need to know what is happening. Some people find pregnancy easy and others find it difficult. Prenatal care for FIFO women may need improvement but first we need to know: what is pregnancy like for women who are FIFO workers or the wives and girlfriends of FIFO workers?

Survey questions were developed together with FIFO women in a Community Advisory Group.

The survey is available at

www.sph.uwa.edu.au/research/fifo

For more information contact the study coordinator, Lorili Jacobs, E: Lorili.Jacobs@uwa.edu.au

HEALTH - PSYCHOLOGICAL

Worker attitudes towards mental health problems and disclosure

The Centre for Addiction and Mental Health in Ontario conducted a poll of more than 2,200 working adults who completed a telephone questionnaire administered by professional interviewers or a web-based survey to determine the perceptions of workers towards mental disorders in the workplace.

They found that a third of workers would not tell their managers if they experienced mental health problems. Rather than a single factor, workers more often identified a combination of factors that would encourage disclosure to their managers. One of the most identified disincentives was the fear of damaging their careers. The most pervasive reason for concerns about a colleague with a mental problem included safety and the colleague's reliability.

Conclusion

Although critical for workers who experience a mental disorder and who find work challenging, a significant proportion do not seek support. One barrier is fear of repercussions. Organisations' policies can create safe environments and the provision of resources and training to managers that enable them to implement them. By making disclosure safe, stigma and the burden of mental disorders in the workplace can be decreased.

Source: International Journal of Occupational and Environmental Medicine, Vol 5, Num 4: Oct 2014, p175-186

Do we really know the extent of mental illness in the workplace?

A leading psychiatrist and researcher, Sam Harvey, has found that Mental illness is now the main reason for incapacitation in Australian workplaces. He estimates costs to be close to \$10b a year and growing while reforms are being held back by stigma and prejudice.

Professor Tony LaMontagne from Deakin University considers that the total burden of mental illness in the workforce is far greater than the amount paid out in compensation claims. He says that there is a huge stigma attached to making a workers' compensation claim for mental illness and he estimates that for every claim there are 30 cases of depression caused by job strain.

Source: ABC RadioNational, Background Briefing, 17 February 2015

High suicide rates linked to occupations

A US study conducted by Elsevier Health Sciences has found that workplace suicides in that country are increasing and specific occupations such as law enforcement put workers at increased risk.

The study reported that the risk of suicide in the workplace was more than three times (5.3 per one million) the national average rate of 1.5 per one million.

Study findings:

- The rate of workplace suicides was 15 times higher for men than for women and nearly four times higher for workers aged 65 to 74 than for those 16 to 24.
- Occupations that were identified as being at a higher risk for suicide were protective service workers such as law enforcement and fire fighters and medical doctors.
- The second highest suicide rate (5.1 per 1 million) was reported for people who worked in the farming, forestry and fishing occupations.
- High workplace suicide rates (3.3 per 1 million) were found among people working in maintenance, repair and installation occupations.
- People working in automotive repair and maintenance had high workplace suicide rates (7.1 per 1 million).

Researchers formed one hypothesis that the increased risk may be due to the workers' access to and availability of lethal means such as firearms for law enforcement officers and drugs for medical doctors. Suicide has also been linked with risk factors such as economic factors and stressors in the workplace.

Source: Examiner.com, 18 March 2015





CREATING MENTALLY HEALTHY WORKPLACES A REVIEW OF THE RESEARCH

WORKPLACE MENTAL HEALTH AN \$11B ANNUAL BURDEN IN AUSTRALIA

The Chair of the National Mental Health Commission, Professor Alan Fels, said recently that Australia's productivity is suffering because too many businesses are not taking action on mental health.

He referred to a report produced by the University of NSW and the Black Dog Institute "Developing a Mentally Healthy Workplace: a Review of the Literature" which identified six success factors for a mentally healthy workplace and a five step process for embedding them.

Professor Fels said that: "Poor mental health is a significant burden on our economy. The direct financial impact of mental ill-health on Australian businesses is in the vicinity of \$11b every year, largely due to absenteeism and reduced productivity."

A summary and full report is available from www.mentalhealthcommission.gov.au/mediacentre/news/workplacementalhealthreport.aspx.

Mental health services spending on the rise

The Australian Institute of Health and Welfare has released new figures which show that the expenditure per person on mental health-related services has increased from \$302m in 2008-09 to \$332m in 2012-13, a rise of 10%.

Estimated national recurrent expenditure amounted to \$7.6b in 2012-13.

Source: AIHW Media Release, 20 March 2015

New blood tests diagnose major depression

A new blood test may be the first objective scientific way to diagnose major depression claim researchers at Northwest's Feinberg School of Medicine in Chicago, who established the test's effectiveness with 32 adults who were diagnosed as depressed and 32 non-depressed adults.

The test works by measuring the blood concentration of the RNA markers (genetic indicators). After blood is drawn, the RNA is isolated, measured and compared to risk levels expected in a non-depressed person's blood.

Source: MedicineNet, 16 September 2014

Source: Safety Solutions, 12 December 2014

COULD LONELINESS SHORTEN A LIFE?

Loneliness has long been associated with poor mental health including depression. A new study now suggests that social isolation may harm physical health too and even hasten death.

The findings are based on a review of data from dozens of studies involving more than 3 million people.

The new research focused on 70 studies completed between 1980 and 2014, all of which explored how loneliness, social isolation and/or living alone affect longevity. Study participants averaged 66 years of age, and about a third struggled with some type of chronic illness.

While the data review couldn't prove cause and effect, it did find a strong association between loneliness and the risk of dying sooner rather than later.

Source: MedicineNet, 17 March 2015

Trees in urban areas may improve mental health

Doctors prescribe fewer antidepressants in urban areas with more trees on the street, according to recent UK research. The study examined the link between mental health wellbeing and the presence of trees in London neighbourhoods. Its findings support the idea that maintaining a link to nature, even in an urban area, may help provide a healthy living environment. While the researchers noted several limitations of their study, they suggest that their findings provide evidence that maintaining or planting urban trees could form a part of public projects that include stress reduction and improved mental health for urban populations in their aims.

The study may well be used to influence employers to give more consideration to its application to workplace environments.

Source: Science for Environmental Policy, Issue 410, 16 April 2015

Mental illness and circadian rhythms

Might living a structured life with regularly established meal times and early bedtimes lead to a better life and perhaps even prevent the onset of mental illness?

In a study led by Kai-Florian Storch, PhD, of the Douglas Mental Health University Institute and McGill University, researchers found evidence that daily activity is influenced by rhythms much shorter than 24 hours, which are known as ultradian rhythms and follow a four-hour cycle. Most prominently observed in infants before they are able to sleep through the night, ultradian rhythms may explain why, on average, we eat three meals a day that are relatively evenly spaced across our daily wake period.

These four-hour ultradian rhythms are activated by dopamine, a key chemical substance in the brain. When dopamine levels are out of kilter – as is suggested to be the case with people suffering from bipolar disease and schizophrenia – the four-hour rhythms can stretch to as long as 48 hours.

The findings have potentially strong implications for the treatment of bipolar disease and other mental illnesses linked to dopamine dysregulation.

Source: ScienceDaily, 21 February 2015

SLEEP/FATIGUE

New reset button discovered for circadian clock

A team of biologists has found a way to use a laser and an optical fibre to reset an animal's (mouse) master biological clock, a discovery that could, in principle, be used therapeutically to treat conditions like seasonal affective disorder, reduce the adverse health effects of night shift work and possibly even cure jet lag.

Until now, neuroscientists had thought that the firing rate of SCN neurons was strictly an output of the biological clock's activity. They did not think altering the level of neuronal activity could affect how the clock operates.

Researchers used a new technique called Optogenetics to manipulate the firing rate of SCN neurons. The technique inserts genes that express optically sensitive proteins into target cells in order to make the cells respond to light.

Researchers said that "this puts clock neurons under our control for the first time."

Source: ScienceDaily, 2 February 2015

Napping beyond age of two linked to poorer quality sleep in young children

Napping beyond the age of two is linked to poorer sleep quality in young children, although the impact on behaviour and development is less clear.

In an analysis of the evidence published online in Archives of Disease in Childhood, researchers wanted to find out what impact napping has on young children's night time sleep quality, behaviour, cognitive and physical health. They found consistent, if not particularly high quality, evidence indicating that napping beyond the age of two lengthens the amount of time it takes for a child to fall asleep (sleep onset) and shortens the overall amount of night sleep the child has.

The link between napping and any detrimental impact on behaviour, development and overall health was less clear cut, largely because of the differences in age and napping patterns of the children studied.

Source: ScienceDaily, 17 February 2015

Melatonin helps to get better sleep

A new study has found that taking 1mg of the hormone melatonin helps people get more – and better quality – sleep in noisy and light environments compared to using ear plugs and an eye mask.

Melatonin is the hormone that is naturally released by our bodies in the absence of light to trigger sleepiness and it is already used to treat sleep disorders or help people overcome jet lag.

But the new research suggests that it might also help people fall asleep, and spend more time in REM, in noisy environments or situations where their natural circadian rhythms are disturbed by fluorescent lights, such as ICUs, where patients desperately need to rest in order to get better.

Source: Chemwatch, 20 April 2015

Small sleep losses can have long-term consequences

Losing as little as 30 minutes of sleep per day on weekdays can have longterm consequences for body weight and metabolism, according to a new study conducted by Weill Cornell Medical College in Qatar, Doha.

The results were presented at the annual general meeting of the Endocrine Society in San Diego, California.

Lead study author Professor Shahrad Taheri said that "while previous studies have shown that short sleep duration is associated with obesity and diabetes, we found that as little as 30 minutes a day sleep debt can have significant effects on obesity and insulin resistance on follow up. This reinforces earlier observations that sleep loss is additive and can have metabolic consequences."

The authors advise that future interventions designed to slow progress or reverse metabolic disease should consider all factors – including sleep – that affect metabolic function.

Source: ScienceDaily, 6 March 2015

HAZARDOUS SUBSTANCES

Hormone disrupting chemicals cost billions in Europe

Common industrial chemicals that disrupt human hormones and damage health could be costing Europe more than £110b per year, according to new research presented at the annual general meeting of the Endocrinology Society in Brussels in March.

An international team said that their estimates on the high economic impact of chemicals in products including pesticides, plastics and flame retardants were "conservative".

The global team of experts concluded that infertility and male reproduction dysfunctions, birth defects, obesity, cardiovascular disease and neurobehavioral and learning disorders were among the conditions that can be attributed in part to endocrine disrupting chemicals (EDCs).

The authors suggest that limiting exposure would have significant benefits.

Source: TUC Risks, #693, 14 March 2015

Chrysotile asbestos still being mined in India, Ukraine and Zimbabwe

The appearance of asbestos industry lobbyists at a meeting organised by UN agencies and funded by the European Commission has been condemned as 'farcical' and a 'junket' by unions.

The event, held in Geneva in March ahead of a Rotterdam Convention conference in May, was hosted by ILO and WHO, with the purpose of exchanging information on chrysotile asbestos. The issue was whether to include chrysotile on the list of exported substances for which 'prior informed consent' must be obtained.

The union body says that "once again, the voice of the genuine, representative, trade union movement and the victims of asbestos will be missing from the convention. The plight of those who have paid with their lives for the profits of this deadly industry seems of little interest to the Secretariat of the Rotterdam Convention."

Source: TUC Risks, #697, 11 April 2015

Asbestos exports to underdeveloped countries to continue

The current Canadian government will not comment but it appears likely that Canada will refuse to support listing chrysotile asbestos as a hazardous substance under global trade rules at UN Rotterdam Convention in May. In so doing, Canada will in effect be helping Russia continue exporting asbestos to developing countries with no safety controls required, despite asbestos being now banned in Canada and no longer exported.

In so doing, the government is ignoring the advice of its own regulators, such as Health Canada.

Source: OHS Reps SafetyNetJournal, 5 March 2015

Asian 'tsunami' of asbestosrelated disease predicted

Writing in the Journal "Respirology" experts from Australia, Indonesia and the UK have warned that, with the increasing use of asbestos in Asia, the continent could be facing an asbestos disease "tsunami".

Although countries such as Japan, Korea and Singapore have curtailed the use of this mineral, there are numerous countries in Asia that continue to mine, import and use this fibre, particularly China, which is one of the largest consumers in the world.

The researchers say that "numerous factors ranging from political and economic to the lack of understanding of asbestos and the management of asbestos-related disease are keys to this observed trend. Awareness of these factors combined with early intervention may prevent the predicted Asian "tsunami" of asbestos diseases."

Source: Risk No. 698, 18 April 2015

Do e-cigarettes help smokers to quit?

The National Health and Medical Research Council (NHMRC) has released a statement summarising the evidence on the safety, quality and efficacy of e-cigarettes which states that "there is currently insufficient evidence to conclude whether e-cigarettes can benefit smokers in quitting, or about the extent of their potential harms."

Further evidence is needed to enable the safety, quality and efficacy of e-cigarettes to be assessed.

Identification of hormone-mimicking chemicals in pesticides blocked by major chemical players

As many as 31 pesticides with a value running into billions of pounds could have been banned because of potential health risks if a blocked European Union paper on hormone mimicking chemicals had been acted upon, reports the Guardian newspaper.

The scientific paper recommends ways of identifying and categorising the endocrine disrupting chemicals (EDCs) that scientists link to a rise in foetal abnormalities, genital mutations, infertility and adverse health effects ranging from cancer to IQ loss.

European Commission officials say that under pressure from major chemical industry players, such as Bayer and BASF, the criteria for categorisations of EDCs – along with the strategy for implementing them, were blocked and in their place, less stringent options emerged, along with a plan for an impact statement that is not expected to be finalised until 2016.

Source: The Guardian, 2 February 2015

USEPA proposal for reporting requirements on nanoscale chemicals

The United States Environmental Protection Agency has proposed reporting requirements on companies manufacturing and importing nanoscale chemicals to gather vital information on the volumes produced, exposure levels, and any environmental health and safety risks.

Meanwhile in Australia, plans to regulate nano forms of existing chemicals seems to have been abandoned, claims the Friends of the Earth.

They say that a nano material register is needed in Australia so regulators can gather the basic information necessary to assess the risks associated with the nanomaterials being used in a rapidly growing number of consumer products.

A government commissioned study in Australia concluded that the cost to business of implementing a register was too high.

Friends of the Earth say that this "Business first" approach to nanomaterials means that consumers, workers and the environment are being exposed to unnecessary risks."

LEGAL/ILLEGAL DRUGS

Working away from home and the use of alcohol and drugs – availability of support

To provide support for those working away from home who are dealing with work-related stress, the Alcohol and Drug Information Services (ADIS) Branch is implementing a state-wide telephone information, support and referral service for those who are concerned about their own and/or others' alcohol and other drug (AOD) use and mental health and wellbeing.

It is expected that the new service and promotional materials will be officially launched in May 2015.

For further information contact sabrinadavies@health. wa.gov.au or telephone 9471 0484.

Synthetic cannabinoids can cause cancer

Scientists from the MedUni, Vienna's Institute for Cancer Research, have found evidence that synthetic substances damage the DNA of human cells and can therefore possibly have cancer-causing effects.

The synthetic cannabinoids, marketed in incense mixtures as "legal highs" via the internet, are "flooding the market" the Institute says.

"The substances are directly active, in other words, they are not activated via enzymes that metabolise foreign substances" explained the spokesman, Siegfried Knasmuller.

"The respiratory organs and the digestive tract especially are subjected to increased concentrations of these drugs. Our investigations on human cell lines in the laboratory have shown that synthetic cannabinoids, in the high concentrations found in cells in the oral cavity or in the lungs, for example, are likely to trigger damage to the DNA that may have consequences for the consumers of such substances. They damage chromosomes, and this is directly associated with cancer."

Source: Drug Discovery and Development, 17 April 2015

Source: Friends of the Earth, 16 April 2015

WORKERS' COMPENSATION

WA workers' compensation premiums now the lowest ever recorded

The Chief Executive Officer of WorkCover WA, Michelle Reynolds, has announced a 4.7% decrease in recommended premium rates for 2015/16. The average recommended premium rate will fall to 1.483% of total wages, which is the lowest recorded in Western Australia.

Ms Reynolds said the decrease in 2015/16 is largely due to a fall in claim numbers and moderate wages growth in Western Australia.

Industry sectors with premium rates above 2% were:

- Agriculture, Forestry, Fishing
- Construction
- Personal and Other Services
- Manufacturing

Occupations with the highest rates were employed in the following sectors:

- Agriculture, Forestry, Fishing
- Construction
- Manufacturing
- Public Order, Safety Services

Source: WorkCover WA, Media Statement, 9 April 2015

Study exposes failing UK cancer compensation scheme

According to a new report by the University of Stirling, Scotland, UK workers suffering occupational cancer and other potentially lethal work-related diseases can forget about any government compensation.

The report found the current compensation scheme excludes seven of the top 10 entries on the official UK occupational cancer priorities ranking.

Diesel exhaust or painting-related lung or bladder cancers are not on the prescribed disease list, nor is welding-related cancer. Skin cancer from solar radiation is also missing.

HSE data conservatively indicates almost 13,600 new cases of occupational cancers each year, yet in 2012 only 2,600 causes were compensated. Remove asbestos-related cancers and just 90 payouts were made, a one percent chance of compensation.

Source: ITUC, 3 April 2015

NSW workers' compensation legislation deprives workers

A report by Macquarie University's Centre for Workforce Futures titled "The Impact on Injured Workers of Changes to NSW Workers' Compensation" issued in December 2014 has recommended a thorough rethinking of government policy in order to achieve the fundamental objectives of guaranteeing support for injured workers and promoting their recovery and continued return to work.

The report focuses on the legislative changes introduced in 2012 which have resulted in a 24% reduction in active compensation claims, the loss of income entitlements for 5,000 workers and the loss of medical benefits for at least 20,000 long term injured workers. In addition, the changes applied retrospectively with legally binding decisions prior to June 2012 rendered null and void.

The report is essential reading for those involved in workers' compensation.

Source: SafetyNetJournal, #313, 12 March 2015

Age no barrier to entitlements for injured workers

WorkCoverWA has issued a general reminder to all parties in the workplace that there are no age based restrictions on entitlements in the WA workers' compensation scheme.

The changes introduced in 2011 mean that injured workers aged 65 years or older are able to access workers' compensation on the same terms as other injured workers.

WorkCoverWA has also advised that acupuncture will be recognised as an "approved treatment" from 1 April 2015.

Source: WorkCoverWA, 18 March 2015

CANCERS

GOLD NANOPARTICLES USED TO DETECT PROSTATE CANCER

A test that costs less than \$1 and yields results in minutes has been shown in newly published studies to be more sensitive and more exact than the current standard test for early-stage prostate cancer.

The simple test developed by the University of Florida scientist Dr Qun Huo, holds the promise of earlier detection of one of the deadliest of cancers among men. It would also reduce the number of unnecessary and invasive biopsies stemming from the less precise prostate-specific antigen test that is now used.

The test uses gold nanoparticles to detect early-stage prostate cancer. The new technique leverages the ability of gold nanoparticles to attract cancer biomarkers.

Source: ScienceDaily, 3 April 2015

Below: Dr Qun Huo. Image courtesy of University of Central Florida



Cancer in the workplace forum for Perth 21 May 2015

The Cancer Council of WA has organised a morning forum on 21 May at the Parmelia Hilton featuring the international keynote speaker Professor John Cherrie from the Institute of Occupational Medicine in Edinburgh, Scotland.

Professor Cherrie is the Research Director of the Institute of Occupational Medicine.

Contact the forum coordinator at workplacecancer@cancerwa.asn.au for further information.



MAY 2015 / MONITOR / 25

Symposium

To discuss the major health related initiatives in the Work Health and Safety Bill 2014

Wednesday, 15 July 2015, Technology Park Function Centre, Bentley, 8:30 am - 3:00 pm

The draft legislation tabled in Parliament in 2014 contains a number of new occupational health initiatives. This symposium will identify and discuss these initiatives in depth and the consequences for employers and employees of their introduction.

Speakers:

Brian Bradley Director General, Department of Commerce

Dr Peter Connaughton Occupational Health Physician, President-Elect, Australian Faculty of Occupational and Environmental Medicine

Prof Maureen Dollard School of Psychology, Social Work and Social Policy, University of South Australia Michael Tunnecliffe Clinical Psychologist, Director, BSS Employee Assistance Pty Ltd

Prof Lin Fritschi Department of Epidemiology and Biostatistics, Faculty of Health Sciences, Curtin University

Tom Martin Partner, Occupational Health and Safety, Norton Rose Fulbright Australia

Registration: OHSA(WA) Symposium - 15 July 2015

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Occupational Health Society of Australia (WA)



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 WA
- 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.

Members

Anitha ARASU Joyce BLAIR, Next Health Alan CLARKSON (Snr) Allaine COLEMAN, CGU Workers' Compensation Terry CONDIPODERO, GR Engineering Services Maria DANIEL **Diana GEMMELL** Lynette GILBERT Patrick GILROY AM, MARCSTA **Dr Andrew HARPER** Emma HORSEFIELD, Jardine Lloyd Thompson Dr Janis JANSZ, Curtin University Ralph KEEGAN, Frontline Safety and Training Services Cheryl KELLY, Viento Group Limited Sheryl KELLY Dave LAMPARD, WA Police Union Joe MAGLIZZA, Holcim Australia Pty Ltd Alison MARTINS, OH&S Consulting Peter McMAHON, Main Roads WA Rosalee MORRIS, Disability Services Commission Peter NICHOLLS, FMR Investments Dr Nicol ORMONDE, Ormonde Health Consulting Craig POWER, OH&S Consulting Peter ROHAN, Department of Mines and Petroleum Sherrilyn SHAW, Return to Work Solutions Dr John SUTHERS, Occupational Physician Prof Geoffrey TAYLOR, Curtin University Dr Christine TEAGUE, Edith Cowan University Les VOGIATZAKIS, Matrix Composites and Engineering Dr Kar Chan WAN, RediMed

Said ABDILAHI, Student, Curtin University Mamadou BAH, Student, Curtin University Alayna CAMPBELL, Student, Curtin University Kevin LEE, Student, Curtin University Jacqueline LUSENO, Student, Curtin University Deepak MARU, Student, Curtin University Claire PRATLEY, Student, Curtin University Claire PRENDEVILLE, Student, Curtin University Tim RICHARDS, Student, Curtin University Izzie SHMUKLER, Student Merima SULEJMANI, Student, Curtin University Erandhi YATAWARA, Student, Curtin University

MARCSTA work health and safety programs

www.marcsta.com



MARCSTA develops and implements work health and safety training programs relevant to all workplaces.

Under the new Work Health and Safety Laws, employers have a duty of care to provide a healthy and safe workplace for workers and contractors.

MARCSTA training programs are now available to organisations wishing to conduct occupational health and safety training of employees.

All our courses underpin relevant units of competency from nationally accredited training packages.

The courses are based on adult learning principles, are interesting, engaging, relevant and current. The information presented is based on solid research by MARCSTA, independent experts and regulatory bodies.

Training materials are supplied in a non-editable PDF format at a cost of

\$40 per person.

If required, your organisation's details and logo can be included as well as any other custom content you require.

Programs . . .

- Work Health and Safety Induction
- Workplace Health and Well-being
- Extended Working Hours and Your Health and Safety
- OHS Training for Supervisors and Managers

All the work is done for you.

You can print as many manuals as you require, when you need them. (Dependent on a signed agreement authorising production of specified numbers of training manuals).

Generally, each course comes complete with downloadable PDF versions of:

- Training Manual
- PowerPoint Presentation (ppt format)
- Assessments
- Assessments Scoring Guide

Should you wish to take advantage of this arrangement please contact MARCSTA on safety@marcsta.com or 6272 6120.