



the work health and safety monitor

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

Issue 1 Vol 18 February 2014



Occupational Health Society of Australia (WA)

Annual General Meeting - 20 March 2014

The Annual General Meeting of the Society will be held at Technology Park Function Centre, 2 Brodie-Hall Drive, Bentley on Thursday, 20 March at 8:00 am.

A continental breakfast will be available from 7:30 am.

The meeting will elect officers and an Executive Committee and determine the future direction of the Society. It will conclude by 9:00 am.

All interested persons, past and potential members are invited to attend as the future direction of the occupational health discipline is of crucial importance to professionals and to society in general, and is perhaps more important today than ever before.



Issues for consideration

The meeting will also prioritise issues of concern for its seminar-workshop program for 2014.

These will include:

- the lack of a national (and local) exposure standard for diesel emissions – both in the workplace and in the public arena
- the decline in OHS training opportunities for professionals (and others)
- the need for a comprehensive system of surveillance for occupational disease associated with poor air quality
- the emerging plateau in the incidence of serious injuries and diseases in the workplace and the parallel reduction in regulatory activities
- the degree of compliance with the Code of Practice on Working Hours

All enquiries should be directed to Paula Sinclair at safety@marcsta.com or 6272 6120.

Further information regarding the Society can be viewed at www.ohswa.marcsta.com

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OHS legislative/regulatory matters

Queensland to amend legislative provisions for HSR's

Proposed amending legislation that will restrict union rights of entry and the ability of health and safety representatives to halt unsafe work will put an end to compliance with the model OHS legislation.

The proposed legislation would:

- require workplace health and safety permit holders to give at least 24 hours notice and outline any suspected safety contraventions before entering a workplace;
- double the maximum fine for entry permit holders who breach the entry provisions to more than \$20,000;
- remove the power of HSR's to direct that work cease.

It is reasonable to conclude that the concept of identical OHS legislation across Australia has been abandoned and the old state regimes system restored.

Safe Work Australia revised Model Health and Safety Legislation

A revised version of the Model WHS Regulations, dated 9 January 2014, is now available from the Safe Work Australia website.

They apply mainly to high risk work, diving work, plant, asbestos and major hazard facilities.

It is important to note that these amendments do not automatically apply in Western Australia.

The fact that the Regulation Impact Statement for the introduction of national model WHS legislation in Western Australia is still not released by the Minister for Commerce suggests that there is little likelihood of the national model being adopted in the immediate future, if at all.

New anti-bullying provisions will test management practices

Jessica Fletcher, a Special Counsel for Hall and Wilcox, has warned that the new provisions extending the jurisdiction of the Fair Work Commission, which seek to address bullying in the workplace, may come at the likely cost of some employees using the process to provide roadblocks to legitimate

performance management and disciplinary procedures.

Employers who fail to ensure that those responsible for managing workers know when and how to best deal with performance issues may be at a higher risk of having to spend time and money responding to bullying claims in the Fair Work Commission she says.

Source: Safety Solutions Net, Dec 2013

The role of unions in health and safety committees

An important report in the American Journal of Industrial Medicine which considered 31 studies from Canada, the US, Australia and the UK, and included input from various sectors and perspectives including government, employers and unions, has concluded that joint management – worker health and safety committees are only effective **where empowerment mechanisms ensure workers have a real voice.**

They also concluded that unions not only improved the effectiveness of committees, they appeared to promote the introduction of legislation that also led to improvement in safety performance.

Source: American Journal of Industrial Medicine, 202, 56, Number 4, pp424-438, 2013

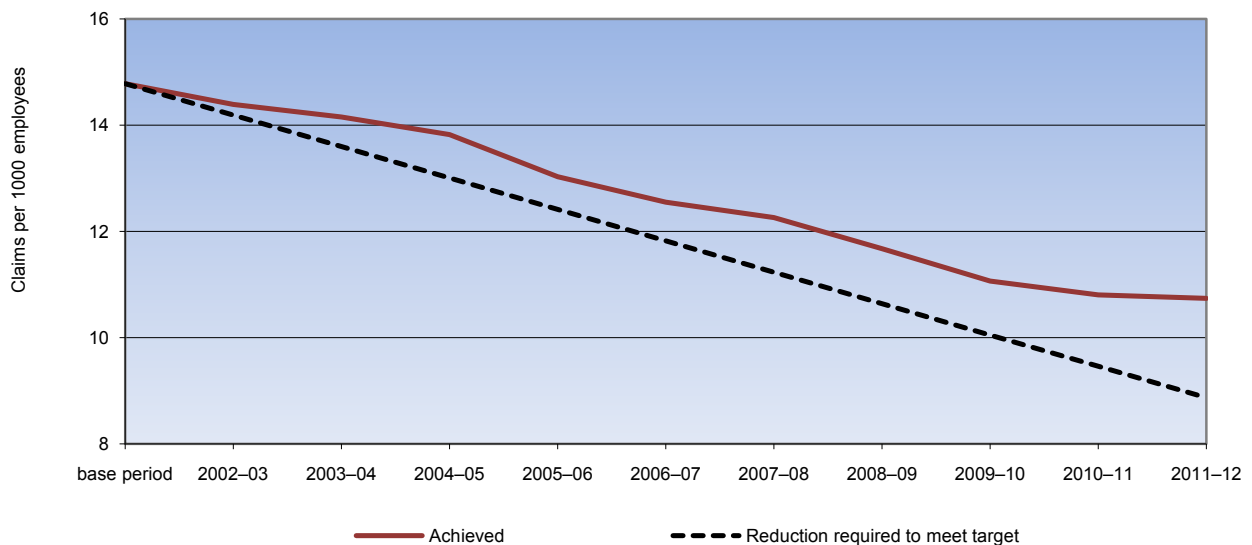
SAFETY

Comparative Performance Monitoring 2011/12 Report

Key work health and safety statistics released by Safe Work Australia report a further reduction in the incidence of compensated work-related fatalities for the year 30 June 2012. This indicates that the target in the National Strategy 2002-12 has been easily achieved, said Safe Work Australia's CEO, Rex Hoy.

The target for the incidence rate of serious claims, however, has no prospect of being achieved and it appears that a plateau has been reached which may require a fresh approach to meet the 2012-2022 Strategy Target of a 30 per cent reduction by 2022.

Incidence rate of serious claims: achieved versus reduction required to meet target



In Western Australia, the Department of Mines and Petroleum has observed a similar pattern in the WA mining sector in recent years.

Source (Resources Safety Matters, Vol 2 Jan 2014).

A significant concern are the statistics related to regulatory activities reported in the Key Work Health and Safety Statistics booklet for Australia 2014.

- The number of infringement notices issued by OHS regulators fell by 37 per cent in the 12 months to 30 June 2012 and the number of prohibition and improvement notices by 13 per cent.
- Legal proceedings finalised against businesses declined by 10 per cent.
- Inspectors conducted 134,000 workplace interventions down from more than 140,000 in the previous year.

No explanation is offered for the decline in regulatory activities although the number of work health and safety inspectors employed remained relatively constant.

Source: Key Work Health and Safety Statistics, Australia, 2013, 2014

Worker motivation to work safely based on their own personal values

Research funded by WorkSafe, British Columbia, suggests that the key to engaging employees in occupational health and safety is intrinsic safety motivation.

Such motivation comes when workers take a personal interest in – and enjoyment from – their safety activities.

WorkSafe's director of Research Services says that they were surprised to learn that external motivations – such as avoiding injury or receiving a reward – appeared to be less important than the more internally driven reasons.

The preliminary findings from the study suggest employees are more motivated to participate in OHS programs and initiatives if they are involved in everything from the initial planning and implementation of the program to its evaluation and any resulting modifications in the workplace.

The report contains suggestions on how employers might build intrinsic motivation into their OHS programs.

Source: WorkSafe BC Magazine, January 2014

The measurement and reporting of work health and safety performance under review

The Safety Institute of Australia and the Certified Practising Accountants Association are co-funding Safe Work Australia to work towards standardising and improving work health and safety reporting by businesses and associations.

Safe Work Australia has released an issues paper, the first in a series that will inform a broader three staged policy development project taking place over the next three years.

There is little new in the content which has been bandied about for a number of years.

It is hoped that there will be a realisation of the small employer factor before designing more complicated reporting mechanisms and at a time when the reduction of red tape seems to be a prime concern.

Source: Issues in the Measurement and Reporting of Work Health and Safety Performance: A Review, November 2013

Quad bikes a major fatality cause

There were 21 quad bike-related fatalities in Australia in 2013 which exceeded the 10 year average of 13 deaths per annum.

Fifteen of the deaths occurred on farms and 11 involved rollovers. Two children under 16 were among the victims.

Source: Safe Work Australia

WorkSafe WA launches truck driver safety campaign

The death of a truck driver in the Goldfields who suffered heatstroke after abandoning his bogged truck and critical comments of the Coroner regarding the lack of communication equipment and maps provided by his employer has led to action. WorkSafe WA has launched a campaign to ensure companies provide emergency communication equipment and water supplies to drivers.

It is hoped that this will include a basic training program to ensure understanding of the consequences of heat stress and competence in the use of the communications equipment.

Source: WorkSafe WA





How psycho-social factors affect the musculo-skeletal system

Epidemiological studies have shown a strong association between psycho-social risk factors and musculo-skeletal injuries reports Worksafe-British Columbia.

Psycho-social factors can include:

- job demands (time pressure, work load, piecework)
- job satisfaction (lack of task variety, poor skill utilisation)
- job control (lack of influence and decision-making opportunities)
- support (from co-workers and management)

Growing evidence suggests that psycho-social factors can exacerbate the physical risk factors, thereby increasing the risk and severity of MSI's.

Evidence also suggests that focussing not only on the physical demands but on the psycho-social and organisational factors is required to significantly reduce the risk of MSI's in the workplace.

Source: WorkSafe BC Ergonomics eNews December 2013

In Australia, **Comcare has released a Fact Sheet** which provides an overview of what musculo-skeletal disorders are, the multi-factorial nature of the conditions and the need to address both physical and psycho-social hazards in preventing and managing these disorders.

The Fact Sheet discusses the causative factors, what can be done to reduce the risk and responsibility for their management in the workplace.

Source: https://www.comcare.gov.au/__data/assets/pdf_file/0016/120553/The_impact_of_psychosocial_issues_on_musculoskeletal_disorders.pdf

Demolition contractors charged with murder

Contractors involved in demolishing a four-storey building in Philadelphia in June 2012 are facing criminal charges ranging through multiple murder and manslaughter after the building collapsed killing six people and injuring a further 14.

The District Attorney for Philadelphia District, R. Seth Williams, called the collapse 'tragic and preventable' declaring the motive for risking a catastrophe was greed.

Source: EHS Online, November 2013

Our hormone system under attack

Accumulating evidence from research into the effects of exposure to endocrine disruptors and the damage they can do to human health is well documented. Policies to eliminate these chemicals are urgently needed, according to HESA-Mag.

The term 'endocrine disruptors' encompasses a wide variety of exogenous chemical compounds capable of modifying the functioning or elimination of natural hormones in the body.

Their health impacts, modes of action and levels of exposure of the population and the environment have been the focus of European Union research programs over the past 16 years.

Effects on human health include:

- risks to the male and female reproductive systems
- cancers of hormone-dependent organs
- neurological risks (attention-deficit disorder, lowered IQ)
- metabolism (diabetes, obesity)
- neuro-immune system disorders (chronic fatigue disorder, multiple sclerosis)

How endocrine disruptors are unlike other chemicals

They act at very low doses:

- the age at which exposure occurs may be more important than the level of exposure
- the dose-response relationship is not linear
- they can act jointly and cumulatively or synergistically
- they can have multi-generational effects
- they can have long latency
- they can affect persons at all ages

A number of case studies are detailed in the report.

Source: HesaMag#08 autumn-winter 2013

Queensland business awarded \$570,000 for healthy lifestyle initiatives for workers

Queensland's High Risk Industry Work Health Funding Program has awarded a total of \$570,000 to 18 organisations for projects that foster healthy behaviours and work environments so that healthy choices are then easier for workers in high-risk industries such as transport, mining and construction.

Dr Simon Blackwood, Acting Deputy Director-General of the Office of Fair and Safe Work Queensland, said that research shows that better worker health can lead to a reduction in workplace injury and illness, a significant reduction in sick leave absenteeism and reduced workers' compensation claims.

Source: Department of Workplace Health and Safety Queensland

Wellness programs having mixed results

An analysis of Pepsi Co USA's wellness program raises questions about the bottom line effects of such programs, as more and more employers turn to wellness initiatives as a potential remedy for rising health care costs.

A study found that their efforts to help employees to manage chronic illnesses saved \$3.78 in health care costs for every \$1 invested in the effort, however, the program's lifestyle-management components that encourage healthy living did not deliver returns that were higher than the costs.

The study's senior author said that workplace wellness programs have the potential to reduce health risks and cut health care spending. However, employers and policy makers should not take for granted that the lifestyle-management component of the program can reduce costs or lead to savings overall.

Source: EHS Today January 2014

HEALTH

Lack of hand hygiene – a contagious risk factor

Studies suggest that we touch our faces 15 to 20 times every hour, which might seem innocuous at first.

But when talking about viruses like the flu, a contagious respiratory illness, it becomes an important risk factor.

Dr Charles Gerba has found in his years of research that **it only takes a few hours for a virus placed on the front door of an office building to spread to half of the touch surfaces and workers' hands.**

The US Center for Disease Control and Prevention advises people to frequently wash their hands with soap and water or, if this is not available, use an alcohol based hand sanitiser.

Good workplace hand hygiene practice

- make sure all hand-soap dispensers are full and in working order
- place dispensers near rest room exits to provide the opportunity for workers to clean their hands
- ask custodial services and cleaners to give extra attention to cleaning and disinfecting high-traffic surfaces such as fax machines, photocopiers and lunch room appliances
- consider providing disinfectant wipes to encourage employees to be pro-active

Source: EHS Today

As reported in the Monitor (Nov 2012) the Center for Disease Control recommends washing hands for at least 20 seconds and suggests singing "Happy Birthday" twice to allow enough time to remove and rinse away germs.



OSHA releases new resources to better protect workers from hazardous chemicals

The US Department of Labor's OSHA has produced two new web resources to assist companies to keep their employees safe.

The first resource is a toolkit to identify safer chemicals that can be used in place of more hazardous ones. It walks employers and employees step-by-step through information, methods, tools and guidance. They can either eliminate hazardous chemicals or make informed substitution decisions in the workplace by finding a safer chemical, material, product or process.

The second resource is annotated permissible exposure limits tables, which will enable employers to voluntarily adopt newer, more protective exposure limits.

Source: OSHA@<http://www.dol.gov>

Worker exposure to lead

A recent study has found that manufacturing workers in Canada and the USA who use laundered shop towels may be exposed to lead and other metals.

In the study, exposure to metals by workers was estimated based on metal concentrations in towels and exposure modelling.

The study made some exposure assumptions. On the results of the towels tested, a typical worker using an average of 14 laundered towels each day may ingest an amount of lead 400 times higher than the health-based criterion for reproductive effects. This is set by the California EPA. The worker would also ingest more lead than that associated with the US-EPA action level for drinking water.

The study estimated workers' exposure to 28 different metals in laundered towels collected from 38 US and 16 Canadian companies. These included printing, aviation, automotive, metal manufacturing, electronics, food and beverage packaging, chemical manufacturing and a range of other industries as well as military plants.

Concern for workers' exposure to chemicals and metals through inadvertent transfer of these substances from hands to mouth is rarely addressed in occupational health literature.

Source: Cos-Mag, November 2013

HEALTH - AIR QUALITY

EXPOSURE TO DIESEL EXHAUST AND LUNG CANCER RISK IN AUSTRALIA

Research into the association of occupational exposure with diesel exhaust and lung cancer risk in Australia, using data from the WA mines, is being conducted by the Harry Perkins Institute for Medical Research at the University of Western Australia.

Lung cancer is the leading cause of cancer death in Australia in both males and females. Almost 10,000 Australians are diagnosed with lung cancer each year. In Australia, 29% of lung cancers among males and 5% of lung cancers among females may be caused by occupational exposures (e.g. asbestos, silica and diesel). Diesel exhaust has recently been classified as a carcinogen. Most evidence came from US studies in the mining and trucking industries. Until today, no such studies have been done in Australia, although 18% of the Australian workforce is estimated to be occupationally exposed to diesel exhaust. In addition, because exposure to diesel exhaust extends beyond the workplace, lung cancer risk due to diesel exhaust is relevant for the whole community. Australia lags behind many comparable countries regarding the implementation of emission standards.

The project will establish a cohort of all miners in WA (1996-2012), link this cohort to the cancer register and mortality records on an individual level, and estimate the lung cancer risk among WA miners over the background risk. (Aim 1)

Secondly a database of diesel exhaust monitoring results will be used to determine exposure levels in mines and factors influencing those levels. The diesel exhaust measures will then be applied to information on the WA mining workforce to describe the extent of diesel exhaust exposure among WA miners. (Aim 2)

The exposure levels from Aim 2 will be linked to the cohort from Aim 1 to describe the exposure-response relation between diesel exhaust and lung cancer. (Aim 3)

The results will be extrapolated to the Australian population to estimate the attributable fraction of lung cancers due to occupational exposure to diesel exhaust in Australia. (Aim 4)

This project will inform the setting of emission standards for diesel exhaust and permit focused interventions to reduce exposure. Reducing exposure levels will reduce the burden of lung cancer in the whole community.

Diesel exhaust and lung cancer in the USA and UK

An estimated 6 per cent of lung cancer deaths in the United States and the United Kingdom – 11,000 deaths per year – may be due to diesel exhaust according to a study recently published in *Environmental Health Perspectives*.

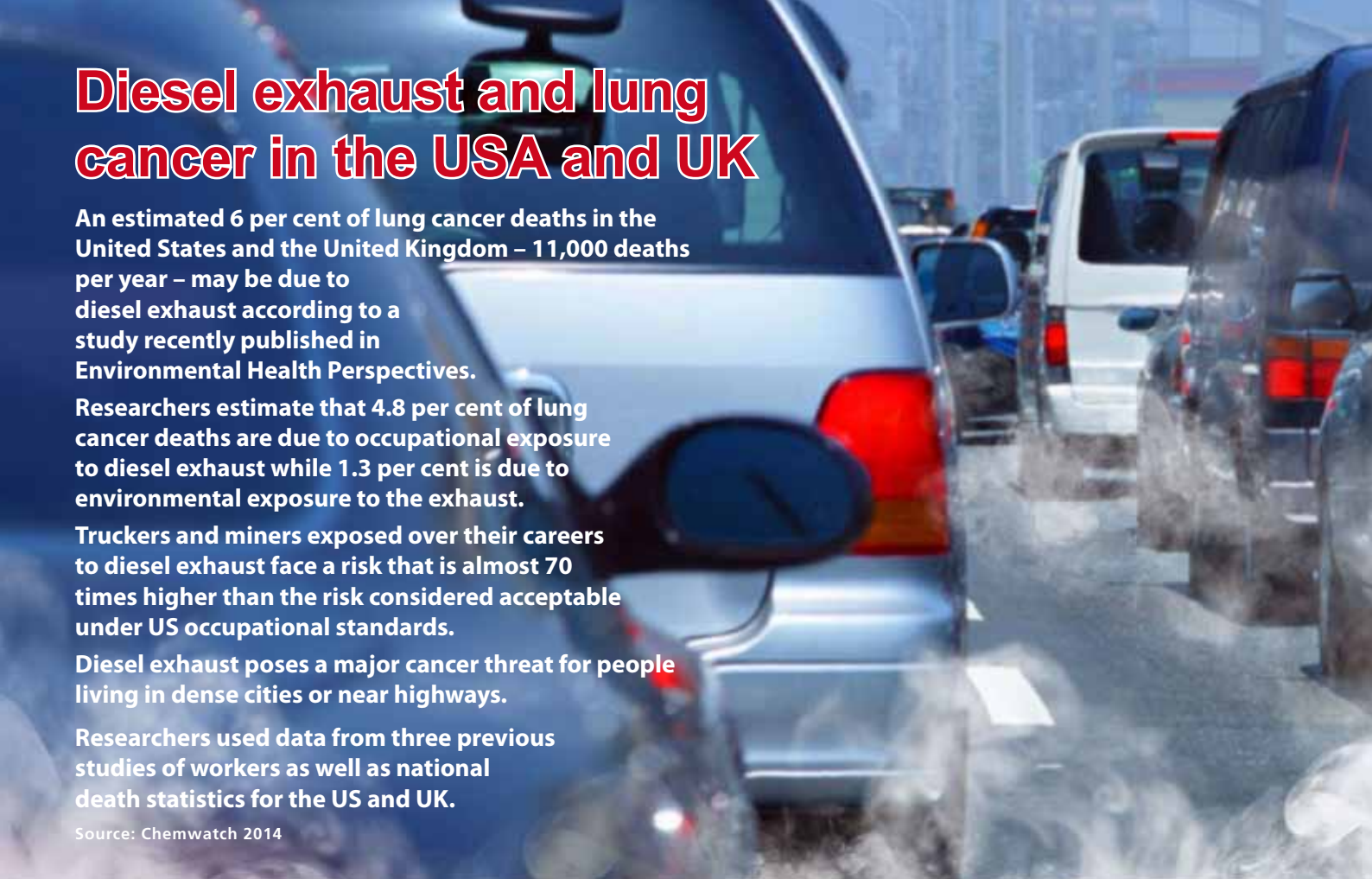
Researchers estimate that 4.8 per cent of lung cancer deaths are due to occupational exposure to diesel exhaust while 1.3 per cent is due to environmental exposure to the exhaust.

Truckers and miners exposed over their careers to diesel exhaust face a risk that is almost 70 times higher than the risk considered acceptable under US occupational standards.

Diesel exhaust poses a major cancer threat for people living in dense cities or near highways.

Researchers used data from three previous studies of workers as well as national death statistics for the US and UK.

Source: Chemwatch 2014



Airborne exposure to chemicals of long-haul flight attendants a concern for Parkinson's disease

Parkinson's disease expert Professor Kay Double from the Sydney University's Medical school commented on the government requirement for insecticide spraying of aircraft cabins landing in Australia. She said that there is epidemiological evidence that exposure to chemicals in pesticides is associated with an increased risk of Parkinson's disease.

Most research has been done with farmers who have been found to have an increased risk from the use of chemical pesticides. Professor Double said that regular and total exposure in a confined space, such as aircraft, could greatly increase the risk of developing Parkinson's disease in later life.

Source: Sydney Morning Herald



Responsible development of nanotechnology

On December 7, 2013, the Journal of Nanoparticle Research published an online article "Occupational safety and health criteria for responsible development of nanotechnology". The authors, who are affiliated with the US National Institute for Occupational Safety and Health (NIOSH), describe five criterion actions that they believe should be practiced by decision-makers to ensure the responsible development of nanotechnology:

- “(1) anticipate, identify, and track potentially hazardous nanomaterials in the workplace;
- (2) assess workers’ exposures to nanomaterials;
- (3) assess and communicate hazards and risks to workers;
- (4) manage occupational safety and health risks;
- (5) foster the safe development of nanotechnology and realization of its societal and commercial benefits.”

According to the authors, because of the current “unknowns and concerns about nanomaterials,” ...“it is prudent to treat them as potentially hazardous until sufficient toxicology, and exposure data are gathered for hazard and risk assessments specific to nanomaterials.”

The article notes: “The findings and conclusions of this report are those of the authors and do not necessarily represent the views of the National Institute for Occupational Safety and Health.”

Source: *Environmental Expert*, January 2014

Chronic Obstructive Pulmonary Disease linked to memory loss

A new study by the Mayo Clinic has found that people with chronic obstructive pulmonary disease (COPD) are about twice as likely to develop mild cognitive impairment and it is likely to include memory loss.

The lead researcher, Dr Balwinder Singh MD, said that COPD is reversible in early stages, especially in smokers. These findings are important because they highlight the importance of COPD as a potential risk factor for mild cognitive impairment and will hopefully lead to early intervention to prevent incidence or progression.

Emphysema and chronic bronchitis are the most common conditions that make up COPD.

Source: *OHS Online* December 2013

Pollution peaks linked to cardiac arrest

Research by Monash University looked at 8,551 cases of out-of-hospital cardiac arrest in the Perth metropolitan area attended by paramedics between 2000 and 2010. It correlated them with hourly air pollution levels recorded at seven monitors and found that high air pollution levels are linked to an increase in cardiac arrest.

The research found that an increase in particulate matter smaller than 2.5 microns was associated with a more than 10% increase in the risk of out-of-hospital cardiac arrest. High carbon monoxide levels were also associated with a significantly higher risk.

Monash University research fellow Lahn Straney says that the effect of air pollution on cardiac arrest is likely to be stronger than reported because it is difficult to accurately measure people's personal exposure to pollution.

Between 2000 and 2010 there were 1,464 occasions when Perth recorded pollution levels exceeding acceptable limits set by the National Air Quality Standards.

Source: *ScienceWA* November 2013

HEALTH - CARCINOGENS



US firefighters have increased risk of cancer

Researchers from the US National Institute for Occupational Safety and Health have found that a combined population of 30,000 firefighters from three large cities had higher rates of several types of cancers, and of all cancers combined, than the US population as a whole.

The researchers found that:

- cancers of the respiratory, digestive and urinary systems accounted mostly for the higher rates of cancer seen in the study population. The higher rates suggest that firefighters are more likely to develop these cancers.
- the firefighters in the study had a rate of mesothelioma two times greater than the rate in the US population as a whole. The researchers said that the findings were associated with exposure to asbestos, a known cause of mesothelioma.

Source: *SafetySolutions* October 2013

Environmental exposure to carcinogens needs urgent attention

An important study was carried out by members of the Centre for Public Health Research at Massey University's College of Health (NZ) into the occupational exposure to carcinogens. Industries studied ranged across agriculture, the construction industry, health services and machinery and equipment manufacturing. The study found that there are more than 50 known human carcinogens commonly present in New Zealand workplaces.

The work was prompted by a lack of national data on the extent and spread of occupational exposure.

The study found that 87% of NZ joinery workers and 63% of furniture workers are exposed to inhalable wood dust levels in excess of international standards of 1 mg/m³.

A second study found that there are more than 50 known human carcinogens commonly present in NZ workplaces. Among the most common of these are asbestos, benzene, formaldehyde, involuntary smoking, solar radiation and occupational exposure as a painter.

Centre Director Professor Jeroen Douwes says that occupational disease is largely responsible and, given the size of the problem, effective preventive solutions are urgently needed. The studies are a crucial first step towards successful interventions.

Source: *SafetySolutions* October 2013

Australian workers' exposure to carcinogens

A study conducted by the University of WA and the Harry Perkins Institute of Medical Research has revealed that 40% of workers are exposed to cancer causing agents in their current employment, with men at higher risk than women.

The study revealed that the 3.6 million Australian workers most likely to be exposed to carcinogens lived in regional areas and often included men and women working in farming, mining and transport.

The top four occupational cancer risks were sun exposure, diesel engine exhaust, environmental tobacco smoke and the solvent, benzene.

The findings were based on a random sample of 5,023 Australian workers aged between 18 and 65.

Professor Lin Fritschi says that the figures are higher than ever before because they questioned workers from small and medium enterprises including people who are self-employed. In the past, the only data available came from big organisations with resources such as occupational health and safety staff to conduct surveys.

Source: *British Medical Journal, Occupational and Environmental Medicine.*

Radiation before surgery doubles the survival rate for mesothelioma patients

In a study published in the *Journal Thoracic Oncology* researchers report that treating mesothelioma with radiation before surgery shows the three year survival rate more than doubled for study participants compared to treating with surgery first.

Dr Cho, the principal investigator, said that the patients in the study experienced shorter treatment, fewer complications and speedier recovery.

Source: *OHS Reps SafetyNetJournal* February 2014

PSYCHOLOGICAL HEALTH



Risk of depression related to both too much or too little sleep

According to two new studies both too-little sleep and too-much sleep can increase the risk of depression. Both short and excessively long sleep durations appear to activate genes related to depressive symptoms says lead investigator Dr Nathaniel Watson from the Medicine Sleep Center at the University of Washington.

One study included more than 1,700 adult twins. Among those who get normal amounts of sleep (7-9 hours) the genetic influence on symptoms of depression was 27%, versus 53% for those who slept only five hours a night and 49% among those who slept 10 hours a night.

The second important study included more than 4,100 youngsters aged 11 to 17. It found that sleeping only six hours per night increased their risk for major depression which, in turn, increased their risk for too-little sleep.

The results suggest that sleep deprivation may be a precursor to major depression in adolescents, occurring before other symptoms of major depression and additional mood disorders, said principal investigator Professor Robert Roberts from the School of Public Health at the University of Texas.

Source: MedicineNet, February 2014



Australia does well comparatively but needs to address levels of depression

Researchers from the University of Queensland report that Australia does well compared with other countries following an analysis of the Global Burden of Disease Survey and other international research.

The study shows Australia, Japan and the UK are among a handful of countries with a lower than average number of years with depression.

Even so, depression is the country's second most disabling medical condition with only lower-back pain causing more anguish.

Professor Nicholas Glozier from the University of Sydney says that the study confirms that we need to pay attention to depression which is really important from a public health point of view.

Source: Nine News, November 2013

Human cells age faster after depression

Dutch researchers have found that psychological distress as experienced by depressed persons has a large, detrimental impact on the wear and tear of a person's body. This results in accelerated biological aging, that is, the cells of people who have had depression may age more quickly.

The results remained the same even after researchers accounted for a host of lifestyle factors that can also damage DNA, such as heavy drinking and cigarette smoking.

Depression is known to disrupt many physical systems. It alters hormones, suppresses the immune function and changes how nerves work.

People with a history of depression have greater risks for diseases of aging such as heart disease, type 2 diabetes, dementia and cancer.

Source: MedicineNet, November 2013

Suicide risk similar for all newer anti-depressants

Previous studies, including a review from the US Food and Drug Administration, have concluded that children and teens who take anti-depressants might be at higher risk for suicidal thoughts and behaviour - especially in the first few weeks of treatment. A new study, however, shows that when it comes to treating depression in children, newer antidepressants all seem to carry about the same risk for suicidal thoughts and behaviours.

Dr William Cooper, a professor of paediatrics and health policy at Vanderbilt University in Nashville, Tennessee, said that there doesn't seem to be a different or higher risk for one medication over another.

The findings echo the conclusions of a 2010 study that also found no differences in suicide risk between anti-depressants among nearly 21,000 Canadian children who were followed for nine years.

Source: MedicineNet, January 2014





FATIGUE

Overnight trips most risky for truck crashes

A Monash research study of the relationship between sleepiness and truck crashes has found that truck drivers who work for more than three hours in a row overnight are as much at risk of a crash as mid-range drink-drivers. The study also found drivers with less experience and those who do not use modern technology (e.g. anti-lock braking systems or cruise control) also have a significantly higher risk of an accident.

The rate of accidents involving trucks in Australia has remained consistently high in the past decade, despite the general fall in serious road accidents, but it could be reduced if fewer long-haul truck trips were scheduled for the early hours of the morning. The researchers interviewed 530 truck drivers who had been in a non-fatal crash between 2008 and 2011, and compared the results of the interviews with 517 drivers who had not crashed.

They found the chance of crashing increased more than 300% when the driver was on the road between midnight and 6am, compared with 6am to midday. The chance of a crash was also more than 200% higher when a driver had not taken a break for more than four hours. Professor Mark Stevenson's study, published in the American Journal of Epidemiology found that more than three hours' continuous night driving could contribute to performance errors equivalent to a blood alcohol level of 0.08.

Fatigue is commonly identified as one of the three main killers on the roads.

Source: OHS Repts SafetyNet Journal February 2014

Safe driving plans now required for truck drivers

From 1 May 2014 requirements place obligations on both the driver and the employer or hirer of long distance operations using vehicles with a gross vehicle mass of more than 4.5 tonnes. Safe driving plans must include the driver's remuneration, fitness for work, training (including training in a drug and alcohol policy) and travel arrangements (time frames, scheduled rest and other breaks etc), plus instructions on fatigue management.

The Road Transport and Distribution and Long Distance Order 2014 is the result of 12 months of extensive consultation with industry stakeholders.

Western Australia is not a signatory.

Source: OHS Repts Safety Net Journal, 273, 19 Dec 2013

New alliance to tackle sleep disruption problems

A Co-operative Research Centre for Alertness, Safety and Productivity has been established with \$14.48 million contributed over seven years from the Australian Government. It is an alliance of technology companies, academics, regulators and employers set up with the object of developing cutting-edge new devices and systems that help protect workers and drivers from fatigue.

The consortium has the audacious goal of reducing injuries by 9,000 a year by 2028 saving the health system almost \$2 billion in costs arising from fatigue-related injuries.

Program leader, Shantha Rajaratnam, of Monash University, says that the consortium will be charged with developing tools that measure alertness accurately, predict critical lapses and intervene before poor alertness impairs productivity and safety.

The total absence of OHS professionals and medical expertise from involvement in the project should be noted.

Source: SafetySolutions January 2014

TRAINING

Formal OHS training under scrutiny

The findings of research into formal OHS training in Canada have revealed that the majority of such training is available through certificate and diploma programs.

Most OHS education and training offered at tertiary level is through distance learning and part-time study and is designed for individuals working as, or seeking employment as, an OHS professional with primary responsibility for co-ordinating and managing OHS programs.

Only a small number of university designed programs were identified that provide advanced preparation for OHS practitioners working in research, policy and key leadership roles.

As little OHS education and training is offered through universities in professional program areas such as nursing, business and engineering, some graduates of those programs may be entering the Canadian workforce with no real understanding of fundamental concepts of OHS. This could have significant implications for both employers and workers.

The lead researcher, Vernon Curran, says that the results of the study highlight gaps or limitations in the existing range and scope of OHS education and training in Canada and that, as a result, we may see development of new programs at the University level.

Given the importance of OHS programs and policy for worker safety, there would appear to be a need for more advanced programs that prepare individuals for positions in policy, leadership and research.

Source: WorkSafe BC Policy and Regulation Update September 2013

WORKERS' COMPENSATION

Stressful compensation claims contribute to poor recovery after injury

A Monash (ISCRR) led study has found that compensation claimants who have stressful claims recover more slowly than those who have less stressful experiences. The study investigated stressful aspects of transport accident or workers' compensation claims, and the impact of that stress on long-term recovery.

It found those who had experienced stressful claims had greater levels of anxiety, depression and disability and a slower recovery from injury. The researchers tracked the experiences of 332 injury patients from across Victoria, South Australia and New South Wales who were hospitalised with injuries between 2004 and 2006, and then claimed compensation.

Source: OHS Repts SafetyNetJournal February 2014

Is safety training over-rated?

A recent article in Occupational Health and Safety suggests that the failure to follow-up or follow-through on safety training results in the initial training not being as effective as it could be.

The writer, Joe Stevens, of Bridge Safety Consultants, says that the most effective training he has seen is delivered in two parts. The first part is comprehensive training that engages workers and involves hands-on demonstrations with as many people as feasible. A month later, instead of moving on to the next topic, a review of the previous month's training is conducted. This time, there is more hands-on, more engagement, and quizzes to make sure that everyone understands the topic. The quizzes should be short, specific and on point for the business. They should not be generic quizzes that are developed to cover a broad range of industries.

One of the benefits of conducting training in this way is the increased effectiveness of the initial training. To get full value, follow-up and follow-through.

Source: OHS Online, OH&S Blog January 2014

Virtual reality mine helps train Queensland workers

A virtual reality mine training facility at the Queensland Government's Simtars Redbank Training Centre, will allow trainees to experience the sights, sounds and challenges of working underground, but in a safe and controlled environment.

It allows miners to experience simulated emergency situations and identify the most appropriate responses to keep themselves and fellow workers safe.

The \$500,000 state-of-the-art facility was developed in partnership with Brisbane company VR Space.

Source: Workplace Health and Safety Queensland eSafe December 2013



AROUND THE GLOBE

Australia

Amphetamine exposure of policemen results in conviction

The NSW Police force has been convicted and fined for exposing three police officers to the hazardous substance methyl-amphetamine in a drug vault in March 2009 and to cocaine one month later.

The Industrial Court found the employer failed to provide appropriate PPE and to provide supervision and to undertake a risk assessment to identify the need to wear PPE while working in the vault.

It was the ninth conviction of the Police Force under OHS legislation since 2002.

Source: OHS Repts SafetyNetJournal January 2014

Canada

New initiative to prevent hearing loss

In British Columbia industrial audiometric technicians who conduct employee hearing tests will be able to immediately upload test results to a WorkSafe BC site. This will enable employers to sign in and get access to quite detailed real-time information on the status of their employees' hearing.

WorkSafe BC's occupational audiologist says that the move to online test results will not only save paper but more importantly could

prevent occupational hearing loss. Faster results will enable employers to make immediate changes such as changing an employee's proximity to a machine, creating noise barriers around equipment, retro-fitting or purchasing quieter tools and ensuring the proper fit of hearing protection.

Source: WorkSafe BC Magazine, January 2014

Database encourages workers to share learning

Golder Associates, an international company with 6,000 employees worldwide, has created a 'learning database' to encourage employees to add at least three learnings annually to improve health, safety and environmental knowledge.

An employee goes online and chooses one of the following categories: injury/illness; environmental incident; near miss; and commendation. They share the time, location, any property damage reports, and other relevant information – along with the names of the project manager and supervisor.

Workers save their input and a copy of the learning is sent automatically to them and to their project manager and supervisor.

The learnings are sent to each group's HSE representative each month. They are discussed at a health and safety meeting for general information and the health and safety expert reports them at the group department meetings as well.

Source: Speaking of Safety, Canada

Denmark

A wide range of dust and fume exposure leads to lung disorders

A literature review funded by the Danish Working Environment and Research Group has found that there is strong and consistent evidence that many dusts and fumes are risk factors for Chronic Obstructive Pulmonary Disease (COPD).

Common identified workplace agents include welding fumes, coke, dust, coal, asphalt, silica and cement. There are many others in a long list.

According to the authors there was a "nearly uniform pattern" of exposure-response relationships between the various exposures and COPD.

N.B. There is no exposure standard for 'dust' generally in Australia and none for dusts of low toxicity, however, there are standards for some particular dusts.

Source: OHSReps SafetyNetJournal Feb 2014

Italy

Management cited for inadequate workplace safety measures

Eight former managers of a now-closed turbine factory in suburban Milan have been charged with manslaughter and bodily harm in connection with more than 30 cases of mesothelioma deaths. The workers became ill after working without adequate safety measures between the 1970's and 1990's when they were allegedly exposed to asbestos.

A total of 33 workers died of mesothelioma and two are currently ill.

Source: OHS Repts SafetyNetJournal Jan 2014

UK

OHS laws in the UK undergoing change

The UK Prime Minister gave a significant address to the UK Federation of Small Business. He announced that "[his] Government has already stopped needless health and safety inspections and will scrap over-zealous rules which dictate how to use a ladder at work or what no-smoking signs must look like."

"We've changed the law so that businesses are no longer automatically liable for an accident that isn't their fault and the new Deregulation Bill will exempt one million self-employed people from health and safety law altogether" he said.

The attack on legal safety protections was condemned by unions, campaigners and safety professionals.

Source: OHS Reps SafetyNetJournal February 2014

The effects of economic downturn on suicide incidence

In an article appearing in the British Medical Journal, research into the impact of the 2008 global economic crisis on suicide has provided support for previous findings of increased suicide risk during periods of economic downturn.

The current study is, however, the first to systematically investigate the effect of economic downturn on suicide incidence in a large number of countries (54*) in different parts of the world.

* 27 European, 18 American, 8 Asian, 1 African

Source: Griffith University, Australian Institute for Suicide Research and Prevention, December 2013

USA

Nursing homes now the most dangerous workplaces in the USA

According to the Bureau of Labor Statistics more than seven per cent of full-time nursing home employees suffered a non-fatal workplace injury or illness in 2012. The injury rate was even higher at nursing facilities operated by state governments where 13.1 per cent of full-time workers experienced an illness or injury.

The private sector nursing homes' injury rate (7.3 per cent) is more than three times the rate of miners and double that of construction workers.

The leading cause of injuries is muscular or skeletal disorders caused by the repeated lifting and moving of patients.

Source: National Journal, November 2013

Long-haul truck drivers more likely to be obese

A new NIOSH study has found that long-haul truck drivers were twice as likely to be obese compared to the adult working population, as well as more likely to smoke and suffer from other risk factors for chronic disease.

The study is the first to provide a comprehensive look at the health status, risk factors and work practices of long-haul truck drivers in the US.

Source: CosMag, January 2014

Mining fatalities increase sharply in the final quarter of 2013

According to preliminary data released by the US Department of Labor's Mine Safety and Health Administration, 42 miners died in work-related accidents in 2013, an increase from the 36 miners who died in 2012.

While fatalities occurred at a record low rate for the first three quarters of 2013, during the fourth quarter of 2013 six coal miners and nine metal/non-metal miners died in mining accidents; a significant increase from the same period in 2012, when four coal miners and two metal/non-metal miners died.

Source: ISHN / DOL 2013

Older workers have fewer injuries but take longer to recover

In the USA, the Bureau of Labor Statistics reports that workers 65 years and over are less likely to have serious workplace injuries but they take more time to recover when they do.

For those aged up to 35 years the incidence rate is relatively consistent. However, for every subsequent 10 year bracket to age 55, the incidence rate increases.

For workers aged 65 years and over the incidence rate decreases but the median days away from work figure is almost double that of the overall workforce rate.

Source: BLS Statistics, December 2013

Workplace exposures to occupational and environmental carcinogens risks a major cause of cancer

The World Health Organization says that lifestyle changes such as the reduction of tobacco and alcohol usage which are recognised as major causes of cancer, are being achieved. There is an urgent need, however, to limit workplace exposures to occupational and environmental carcinogenic risks.

While cancer control measures in high-income countries have demonstrated that prevention works, health promotion alone is insufficient.

Source: OHS Reps SafetyNetJournal February 2014



Occupational Health Society of Australia (WA Branch)

Incorporated in 1978, the Occupational Health Society of Australia (WA Branch) is a non-profit association.

The Society had been inactive for some years and in June 2013 was re-activated to provide 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.

Contractor safety management book

A recently published book "Contractor Safety Management" edited by Gregory Smith will be of interest to both management and contractors and their employees in Western Australia.

The author is the legal practice director for STE Safety and Legal who has spent almost two decades specialising in safety and health management. He previously authored the book "Management Obligations for Safety and Health" published by CRC Press.

The book is available from CRC press (www.crcpress.com). Save 20% by entering the promo code of AQN60 issued to MARCSTA.



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