

MONITOR

Official publication of the
Mining and Resource Contractors Safety Training Association

How does your respiratory program measure up?

FEW PROGRAMS RELATED TO ITEMS OF PERSONAL PROTECTIVE EQUIPMENT ARE AS NECESSARY OR AS HARD TO ESTABLISH AND MANAGE AS RESPIRATORY PROTECTION.

While the goal of any safety and health program is to be the very best, the reality is much less sunny. Our best efforts may set up a quality program but the follow-up, staff changes and shifts in program emphasis may cause the updates to be fewer and farther between. Or no updating or auditing is ever done if management assumes all is well with the program.

Setting up a program that works

- Get management's support and approval by educating them (and the bean-counters) to justify the program.
- Develop a plan of action, do your homework and research and find out what works and doesn't work at other worksites.
- Establish priorities that make sense; start with what is needed immediately.
- Use available technology. Make sure you use what is appropriate to your situation.
- Give employees a say in what is used and listen to them. They wear it and know the plus and minuses of each item (some bean-counters will want the cheapest).
- Call on outside expert advice.
- Use your inside expertise e.g. safety and health committees and safety representatives.
- Ensure human resources personnel are on side.
- Be realistic and keep up with updates and new products.
- Audit the program at least annually.

Source: *Occupational Health and Safety, OHS Online, Stevens Publishing, January 2007*

Draft national code of practice for the control of workplace hazardous chemicals

The consultation period on the above draft closed on 1 February 2007. Once finalised this Code of Practice will form part of the Australian Safety and Compensation Council's Workplace Hazardous Chemicals Framework.

MARCSTA Scope...

As a Registered Training Organisation, MARCSTA has the following nationally accredited programs in place:

Work Safely (General Safety Induction)
Apply Fatigue Management Strategies (Extended Working Hours and Your Health and Safety)
Conduct Local Risk Assessment
Follow Occupational Health and Safety Procedures
Safety Awareness Training Certificate (Construction)
Follow Workplace Safety Procedures
Participate in Workplace Safety Procedures
Work Safely and Follow OHS Policies and Procedures

MNMC5 Metalliferous
TDTF1097B Transport and Distribution
MNMC205A Metalliferous
TDTF197B Transport and Distribution
National Code 51466
BSBCMN106A
BSBCMN211A
RIIG001A

Applications for recognition of prior learning may be lodged for all programs.

In this issue...

| | |
|---|----|
| AXTAT statistics | 2 |
| Failure to plan for consequences of human error..... | 2 |
| Working in confined spaces a continuing concern | 2 |
| Editorial..... | 3 |
| How to live until 85 | 3 |
| Age and gender factors in severity of auto-accident injuries..... | 4 |
| Sitting upright puts unnecessary strain on backs | 4 |
| Canadian standard | 4 |
| Distracted drivers and accidents | 5 |
| Update on cordless cap lamp | 5 |
| Top US workplace issues 2007 | 5 |
| Amputations follow machinery and conveyor belt incidents | 5 |
| ISMSP | 6 |
| New publications | 6 |
| WorkCover Tasmania black spot report | 7 |
| US workers pay for PPE | 7 |
| Regulation of mining sector in Vic to transfer to WorkCover | 7 |
| Assault on WorkSafe inspectors brings fine..... | 7 |
| Falls from heights includes trucks/semi-trailers | 7 |
| Notes for the shift worker..... | 8 |
| Training provider profile..... | 10 |
| MARCSTA visitor..... | 10 |
| News and views | 11 |
| Fatalities around the world | 12 |
| MARCSTA licensed providers..... | 12 |
| Conference and courses..... | 12 |



MARCSTA is a not-for-profit Association. All proceeds are reinvested into the industry for future development of safety and training.

AXTAT statistics 2005/06

Injury related statistics for 2005/06 have been released by DOCEP Resources Safety Division which indicate that there has been little change to the previous year's performance.

Although the overall position appears unchanged the variations between sectors are considerable and warrant close attention.

The AXTAT database is used to record and retrieve information about lost time and disabling injuries resulting from accidents in the workplace. It is a useful tool for identifying:

- Those unsafe work practices causing frequent injury
- The predominant types of accidents in particular occupational groups, workplaces or both
- The frequency of injury to particular parts of the body
- The frequency of particular types of injury sustained in accidents
- The activities being pursued at the time accidents occur

AXTAT figures

| MATERIAL | NO OF EMPLOYEES | % INCREASE (DECREASE) | INJURY INCIDENCE | % INCREASE (DECREASE) | DURATION OF INJURY | % INCREASE (DECREASE) |
|------------------|-----------------|-----------------------|------------------|-----------------------|--------------------|-----------------------|
| Gold | 12,051 | (3.69) | 9.0 | 12.5 | 21 | (17.3) |
| Nickel | 9,682 | 15.68 | 11.5 | (11.5) | 19.5 | 2.6 |
| Iron Ore | 14,428 | 15.80 | 5.0 | 16.3 | 18.8 | 2.6 |
| Bauxite/ Alumina | 9,957 | 15.29 | 5.7 | 23.9 | 15.5 | (8.8) |
| Min.Sands | 2,831 | 8.75 | 6.4 | 28.0 | 10.9 | (43.0) |
| Base Metals. | 1,881 | 69.15 | 5.8 | (67.8) | 17.3 | 27.2 |
| Diamonds | 1,483 | (0.07) | 11.5 | - | 218.0 | (88.0) |
| Salt | 838 | 9.11 | 9.5 | 143.6 | 12.8 | (73.9) |
| Tin, Tantalum | | | | | | |
| Lithium | 540 | 2.85 | 7.4 | (57.0) | 21.8 | 113.8 |
| Const Mats. | 371 | 15.57 | 10.8 | (65.4) | 102.3 | (700.0) |
| Coal | 751 | 10.11 | 14.6 | (33.60) | 194 | 142.5 |
| Exploration | 582 | 16.9 | 36.10 | 361.0 | 18.7 | 57.0 |

The increase in mining employees was 10.19%

The increase in exploration employees was 16.86%

Total employment increased by 10.25%

Source: DOCEP, Resources Safety

Editorial

Some Chinese coal mines have a safety lounge at the entrance. There are photos of the wives or families, together with employees' signatures and the message: "Go to work happily, come home safely." (see the photo).

A Chinese colleague, who is staying with us in Perth, and teaches OHS in China, has studied the operation of work teams in coal mines, and while the mines' safety record generally is not good, nevertheless there seemed to be an idea worth passing on. It is called 3-4-5. (In turn I have suggested she take back an idea from here - bian shi, ping gu, gai shan - identify the hazard, assess the risk, make it better, which we know as SAM).

What is 3-4-5? There are three abilities, four standards and five routines.

3: This relates to the employee. The ability to prevent accidents, the ability to deal with emergencies, the ability to save themselves and others.

4: This relates to the workstation: Ability of the work team leader to get the team to meet the standards, safety devices of employees to meet the standards, safety environment of the workstation to meet the standards, operational procedure of the workstation to meet the standards.

5: This relates to the work environment: Specifications on managing the shopfloor, standardisation in the operation of equipment, obeying all company and supervisor instructions willingly and reporting hazards (like a soldier), work successfully in a team, follow operating procedures fully.

We might disagree with obeying orders like a soldier, if it involves work the employee considers is hazardous, but overall these principles make a lot of sense.

The editor can be contacted at Work Safety and Health Associates.
Tel: 08 9457 6487 or at wsha@iinet.net.au



Monitor Editor, Geoff Taylor

Failure to plan for the consequences of human error

The US Chemical Safety Board has found that an explosion and fire in 2002 which destroyed a chemicals plant and resulted in the deaths of five employees occurred because the company involved did not look closely at the potential for catastrophic consequences resulting from human error.

In addition, employees were not trained to immediately evacuate in case of a major release of hazardous chemicals. Such an evacuation would have saved lives.

Source: New Release, Chemical Safety Board, 7 March 2007

Working in confined spaces a continuing concern

A Victorian timber treating company was convicted in December 2006 and fined \$40,000 for failing to have proper procedures in place for welding in confined spaces.

WorkSafe Victoria found there were no procedures in place, no risk assessment had been carried out, the point of entry was the only ventilation point, there had been no staff training and the person injured was not wearing PPE.

The employee was employed by a contracting firm.

In Berkshire UK in late December 2006, three employees of a building company died when a generator was being run inside a steel storage container.

The HSE issued a reminder to people on construction sites of the dangers associated with using equipment powered by internal combustion engines in confined or poorly ventilated spaces.

Source: TUC - Risks 289, UK and HSE Media Newswire15/2/07



How to live until 85

RESEARCHERS AT THE UNIVERSITY OF HAWAII AND THE PACIFIC HEALTH RESEARCH INSTITUTE, HONOLULU, WHO HAVE STUDIED THE LIFESTYLES OF HEALTHY AMERICAN MEN OF JAPANESE DESCENT LIVING IN HAWAII FOR THE 40 YEARS 1965-2005, AND WHETHER THEY HAD ANY RISK FOR MAJOR ILLNESSES AND HOW FIT AND ALERT THEY WERE, HAVE COME UP WITH SOME INTERESTING FINDINGS.

It turns out that it was not so much what they did but what they didn't do that left them well for so long.

They avoided six risk factors:

- being overweight
- high blood pressure
- excessive alcohol consumption and
- having high blood sugar
- smoking
- high blood fats

A man who had none of these risk factors had a 69% chance of reaching 85 and a 55% chance of being free of illness at that age. A man who had all six risk factors had only a 22% chance of living to 85 and only a 9% chance of being healthy at that age.

Other factors identified that boosted longevity

- more education
- natural physical strength
- marriage
- naturally slim build

TO MAXIMISE THE CHANCES OF LIVING TO 85: BE EDUCATED, MARRIED, NON-SMOKING, THIN AND BE A MODERATE DRINKER WITH NORMAL BLOOD. SOUNDS EASY!

Source: ABC Health Matters, The Pulse 23/11/06



"Go to work happily, come home safely"

Age and gender a major factor in the severity of auto-accident injuries

Understanding the differences among drivers in different gender and age categories is crucial to preventing serious injuries, researchers have concluded in a study showing statistical differences in traffic accident injuries depending on the gender and age of drivers.

The findings are important given the ageing population. In the USA the number of drivers 65 and older is expected to double by 2030 to 70 million. National statistics show that fatalities rose by seven percent for drivers 75 and older from 1981-2000, remained steady for drivers from 65-75, but dropped for younger drivers.

The researchers found statistically significant differences in the severity of injuries suffered in accidents involving men and women drivers and drivers within three age groups: young drivers 16-24; middle-aged drivers 25-64; and older drivers 65 and above.

Because the factors that affect how severely you are going to be injured vary depending on your age and gender, a better understanding of age and gender differences can lead to improvements in vehicle and highway design to minimise driver injury severity, said Fred Mannering, a professor of civil engineering at Purdue University, USA.

Source: Occupational Health and Safety, OHS Online, Stevens Publishing. 12/11/07

Distracted drivers and accidents

A study funded by the US Department of Transportation to help researchers determine how multi-tasking affects driver attention has come up with some important findings.

The researchers evaluated how drivers balance their attention between the road and other activities such as tuning the radio, listening to a book on tape, dialling a hand-held mobile phone and entering a destination into a navigation system.

The research showed that visual and manual tasks cause far more eye glances away from the road than tasks such as listening to a book on tape or voice-guided navigation. Furthermore, test subjects who took their eyes off the road had a greater chance of missing an event that could lead to a crash, such as the driver ahead suddenly braking.

The results of the research, released in December 2006, will help researchers and auto industry engineers determine how multi-tasking while driving affects driver attention and performance. The results will also provide auto makers with tools that can help them design vehicle technologies that do not overly distract drivers.

Source: Occupational Health and Safety, OHS Online, Stevens Publishing.



Sitting upright puts unnecessary strain on backs

According to a new Scottish study sitting in an upright position places unnecessary strain on your back leading to potentially chronic pain problems if you spend long hours sitting.

Presented at the AGM of the Radiological Society of North America in November 2006, the study says that a 135 degree body-thigh sitting posture was demonstrated to be the best biomechanical sitting position, as opposed to the 90 degree posture which most people consider normal.

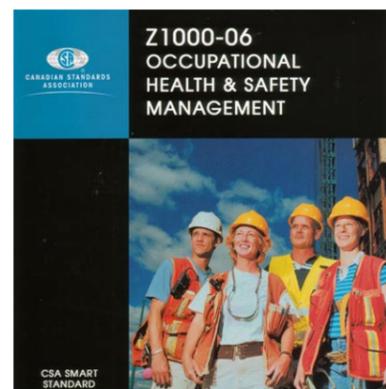


Source: Occupational Health and Safety, OHS Online, Stevens Publishing. 1/12/06

Canadian standard for OHS management systems

The Canadian Standards Association has released a new standard which specifies the requirements for an occupational health and safety management system. It is available on CD-ROM which includes other useful guidance material, references, an assessment checklist and form templates

Source: CSA Z1000-06 Smart CD-Rom, Occupational Health and Safety Management



Update on cordless mining cap lamp

The cordless cap lamp reported in the December issue of the Monitor has received Certificates of Conformity for use in an explosive atmosphere and have been tested and certified for use in underground coal mines in New South Wales and Queensland.

Any technical queries should be referred to Denis Brown at DOCEP Resources Safety.

Source: Department of Consumer and Employment Protection, Resources Safety



illumination, adding colour contrast, eliminating heavy lifts, designing work floors and platforms with smooth and solid decking, reducing standing time, removing clutter from control panels and computer screens, using large video displays, reducing noise levels and much more.

Of particular interest in this list is NANOTECHNOLOGY which is an area where more research is needed on potential health effects for both workers and consumers.

To learn about nanotechnology go to Health and Safety at Work website [www. http://hesa.etui-rehs.org/uk/dossiers/dossier.asp?dos_pk=18](http://hesa.etui-rehs.org/uk/dossiers/dossier.asp?dos_pk=18).

Source: Occupational Health and Safety, OHS Online, Stevens Publishing. 9/11/07

Amputations follow rotating machinery and conveyor belt incidents

THE NSW DEPARTMENT OF PRIMARY INDUSTRIES HAS ISSUED AN ALERT FOLLOWING MAJOR HAND INJURIES AND FINGER AMPUTATION WHEN AN OPERATOR'S HANDS WERE CAUGHT UNDER THE HEAD DRUM OF A MOVING CONVEYOR WHILE ATTEMPTING TO FREE A BLOCKAGE.

In the UK two employees operating grass collectors had amputations of a hand and thumb, finger and part of a hand respectively when their hands were caught in rotating machinery.

Kubota UK Ltd were fined A\$450,000 and ordered to pay costs of A\$50,000 on a number of charges for failing to effect previously ordered design modifications.

Source: NSW Department of Primary Industries Safety Alert 1/11/06 and UK Government News Network media release 5/12/06

MARCSTA members

FULL MEMBERS

Ausdrill Ltd
Barmenco Limited
BGC Contracting Pty Ltd
Brambles Industrial Services
Cooks Construction Pty Ltd
GR Engineering Services
GRD Minproc

Kellogg Brown & Root Pty Ltd
Komatsu Australia Pty Ltd
Macmahon Contractors Pty Ltd
Rinker Australia Pty Ltd
Roche Mining Process Engineering
Skilled Group Ltd
Thiess Pty Ltd

ASSOCIATE MEMBERS

AVELING
Jako Industries Pty Ltd
Mandurah Safety and Training Services Pty Ltd
QFS Australia Pty Ltd

Top workplace issues for 2007 in the USA

The President of the American Society of Safety Engineers has identified the ageing workforce, nanotechnology, a possible flu pandemic, disaster preparedness and response, and doctoral programs in safety as among the key concerns for the members of the Association.

It is estimated that by 2014 in the USA the 55 and older age group will make up 21.2% of the workforce. To accommodate these changing dynamics in an ongoing effort to reduce fatality rates, businesses should therefore focus on designing workplaces which could include improving



The late Jim Torlach

MEMBERS OF THE ASSOCIATION HAVE VOTED UNANIMOUSLY TO PROVIDE SUPPORT FOR THE JIM TORLACH COMMEMORATIVE FUND WHICH HAS BEEN ESTABLISHED TO PROVIDE A SCHOLARSHIP FOR STUDENTS COMMENCING TERTIARY STUDIES IN OCCUPATIONAL SAFETY AND HEALTH.

The target amount required to award the scholarship annually is \$300,000 which, invested at current interest rates, will yield close to \$20,000 per annum.

The scholarship award covers HECS fees for the three years of study, provided students continue to achieve high performance results annually.

The fund currently stands at \$120,000 and contributions will continue to be sought from either company or private donations.

A Trust Deed is under development and an application will be lodged to obtain tax exempt status.

The scholarship for 2007 has been awarded to Cassandra Prideaux who has commenced a Bachelor of Science – Occupational Health and Safety at Curtin University.

Contributor enquiries can be addressed to the Society or to the MARCSTA executive.

Planned activities

Following a survey of members a general meeting will be scheduled to plan the 2007 professional development activity and to establish a timetable for the law examination and hopefully, the professional certification of more members.

A date for this meeting will be circulated shortly.

Get well message

A member of the Society, Taff Langley, is recovering from a complex operation which will hopefully restore him to full health and voice. We wish him a speedy, full recovery and return to work.

Torlach papers

Certain historical papers authored by Jim Torlach and which may be of interest to ISMSP members are now available for download from the website www.marcsta.com/ISMSP.

ISMSP members

Associate

David Bies
Dale Cocker
Dr Mike Gouws
Professor Peter Lilly
Nick Mabbott
Jason Roberts
Mal Sanders

Professional

Charles Tony Baker
Reuben Barber
Terry Condipodero
Geoff Day
Linda Elezovich
Andrew Extract
Rob Filmer
Lynette Gilbert
Patrick Gilroy AM

Ross Graham
Michael Gray
Phil Harris
Andrew Johnson
Vicki Jones **CMSP**
Ray Kennedy **CMSP**
Geoff Knight
Taff Langley
Peter Luobikis
Joe Maglizza **CMSP**

Michael McCudden
Brett McIntosh
Vic Roberts
William Roche **CMSP**
Grant Shearwin
Stephen Smith
Noel Wendt
Stephen Woods
Amanda Youngman

new publications

WorkSafe/Resources Safety WA:

*Guidance Note. Formal Consultative Processes at the Workplace.
Safety and Health Representatives Handbook.*

DOCEP Resources Safety WA: MIAC

*Code of Practice: Prevention and Management of Violence, Aggression and Bullying at Work
Guideline. Dealing with Bullying at Work.*

WorkCover Tasmania - Occupational Black Spots Injury Report update 2006

This report identifies occupational groups that are most at risk of incurring severe injuries and analyses the factors contributing to the occurrence of severe injuries within each occupational group.

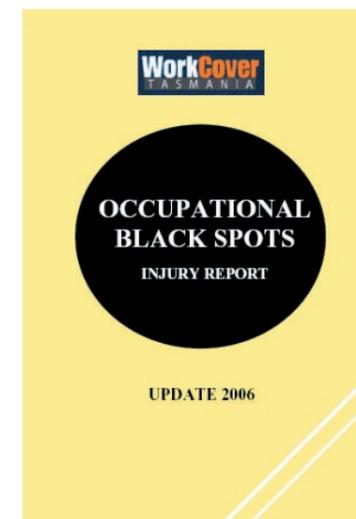
Using data from the three year period 2002/3 – 2004/5 the following 13 black spot occupations have been identified, in order of severe injury incidence.

1. Nursing and care workers
2. Factory workers
3. Road transport drivers
4. Agricultural labourers
5. Cleaners
6. Metal tradespersons
7. Construction tradespersons
8. Clerical workers
9. Plant operators
10. Sales assistants
11. Hospitality workers
12. School teachers
13. Storepersons

These groups make up 71% of all injuries and 75% of severe injuries.

While severe injuries make up 8% of all injuries they account for 68.1% of total estimated incurred costs.

Source: WorkCover Tasmania Occupational Black Spots Injury Report, Update 2006



Regulation of mining sector in Victoria to transfer to WorkCover Authority

The Victorian Government has announced the transfer of responsibility for OHS regulation of the resources sector from the Department of Primary Industries to Victorian WorkCover Authority. A transition process will continue in the period to the takeover date of 1 January 2008.

Source: Department of Primary Industries, Minerals and Extractive Operations Newsletter, February 2007

Assault on WorkSafe inspectors brings heavy fine

Two Victorian men who assaulted an inspector and removed and buried an incriminating film of unsafe work practices were fined a total of \$15,000 in the Mildura Magistrates Court.

WorkSafe Victoria's executive director, John Merritt, said that the case reinforced the message that inspectors must be allowed to do their job without interference.

An inspector's camera was forcibly taken from him and the film buried in a drainage project trench.

Source: AAP 23/1/07

Falls from heights includes trucks/semi-trailers

The NSW Department of Primary Industries has warned of an unacceptable number of incidents related to the covering of loads on trucks and semi-trailers. Most of the injuries incurred resulted from falls from heights.

Causal factors include:

- equipment not fit-for-purpose being used to cover loads
- people working at height to operate or maintain the cover mechanism
- people not wearing fall arrest equipment when working at height or not being supplied with a safe work platform.

In another incident an excavator operator slipped and fell approximately 3.5 metres to the ground while undoing an hydraulic fitting on top of the excavator boom. He sustained serious injuries to his left leg and right pelvis.

The NSW Department advised that a number of similar incidents have occurred recently where persons have been seriously injured while working at heights.

Source: NSW Department of Primary Industries Safety Alert 4/1/07

US workers continue to pay for personal protective equipment

The US Department of Labor is being sued by the Foodworkers' Union for failing to issue a standard requiring employers to pay for personal protective equipment. Issuing a ruling would require employers to meet the cost of protective clothing, lifelines, face shields, gloves and other equipment used by an estimated 20 million workers to protect them from job hazards.

The union claims that as OSHA has failed to act the only recourse is to the courts who will be asked to compel OSHA to act.

Source: TUC – Risks 289 13/1/07



Notes for the Shift Worker

Are night owls more creative?

Research carried out in Italy suggests that night owls are more likely to be creative thinkers. While not able to fully explain why they might be, they suggest that it could be an adaptation to living outside the norm, that is, that being in situations which diverge from conventional habit may develop an ability to find alternative and original solutions.

The researchers also discovered that age didn't curtail creativity.

Hans Van Dongen who helped to discover the biological explanation between morning and evening types i.e. that evening types have a biological clock that runs two hours later (morning types run two hours earlier), suggests that the observed differences in creativity might have to do with the fact that evening people also tend to be more extroverted than morning or intermediate types.

“One could reasonably envision a link between the personality trait of extroversion and the finding of creativity” he says.

Source: ABC News in Science, 13/12/06

Nasal obstruction linked to daytime sleepiness and lower quality of life

A Japanese study suggests that nasal congestion is associated with poor quality sleep and a reduced quality of life.

The researchers reason that chronic nasal obstruction impairs quality of life due to excessive daytime sleepiness possibly caused by sleep disordered breathing.

They suggest that treating nasal obstruction could improve both quality of life and daytime functions in patients with nasal problems.

Source: National Sleep Foundation Alert, 20/12/06

Long hours in developed countries a health and safety risk

New research published in the American Journal of Industrial Medicine warns that long hours and longer working lives in developed countries is leading to greater lifetime exposures to health and safety risks.

Researchers estimate that there are about 2 million work related deaths annually with the biggest categories of work-related diseases now cancer, circulatory diseases and communicable diseases.

In developing countries work exposures may start in infancy. Due to industrialisation workers in these countries are facing new conditions without the relevant knowledge and skills to minimise risks.

Source: SafetyNet Journal 106, 19/1/07

Fatigue results in loss productivity

The January edition of the Journal of Occupational and Environmental Medicine (USA) reports that nearly 40% of US workers experience fatigue, a problem resulting in a significant loss of productivity.

Fatigue was more common in women than men and in workers less than 50 years of age. Workers in relatively well-paid jobs with decision making responsibilities also reported higher rates of fatigue.

The rate of lost productivity for all health-related reasons was much higher for fatigued workers. Total lost productive time averaged 5.6 hours per week for workers with fatigue compared to 3.3 hours for their counterparts without fatigue.

The authors suggested that employees offer “work-life programs” to help employees balance their work and personal responsibilities and take steps to improve assessment and treatment for the large sub-group of workers who have fatigue occurring with other health conditions.

Source: Occupational Health and Safety, OHS Online, Stevens Publishing. 16/1/07

Worldsleep07

WorldSleep07, the World Congress of the Federation of Sleep Research Societies, is scheduled to be conducted in Cairns from 3-6 September 2007. This scientific program brings together many of the world's leading researchers and writers in the area of sleep research and sleep medicine.

Full details are online at www.worldsleep07.com

The role of the circadian clock in the development of type 2 diabetes

Rates of type 2 diabetes, also known as adult onset diabetes, are on the rise and efforts to understand and reverse this trend are primary goals of both health care professionals and public health officials around the world.

Historically seen in older adults, type 2 diabetes is increasingly found in young adults and children, mainly due to rising rates of obesity.

Research is showing that people with diabetes have disturbed sleep and that short sleep and poor sleep quality are associated with poor blood-sugar control.

Based on these findings, a team of researchers from the Netherlands are proposing that the circadian clock may lose its feeling for internal and external rhythms in younger people.

In older people, they explain, changes in the biological clock are the result of nerve cell death. In contrast, the clock changes in younger people with diabetes may result from the “modern lifestyle” including sleeping late, short sleep, and constant metabolic excess. These conditions have the potential to disrupt the biological clock and led to diabetes.

Source: National Sleep Foundation Alert 8/11/06

Corporate liability for employees' fatigue accidents extends to the commute home

The Texas Court of Appeals has upheld a jury award where a drilling company was found liable for an employee's fatigue-related accident while driving home from work.

Driving home after working a 12 hour night shift, the employee crossed the highway median and collided head-on with another vehicle resulting in four fatalities.

This finding is an important reminder of the necessity of implementing a fatigue risk management system and fatigue training programs.

Source: Circadian Technologies, Managing 24/7

Napping helps the heart

In a study of more than 23,000 Greek men and women aged from 26-86 researchers found that napping at least three times a week for thirty minutes is associated with a significantly decreased risk of death from heart disease. People who regularly took a siesta had a 37% lower coronary death rate.

Source: Circadian Technologies, Managing 24/7

Do circadian rhythms affect athletic performance?

Yes, they do! A new study has found that time of day has a significant impact on athletic performance.

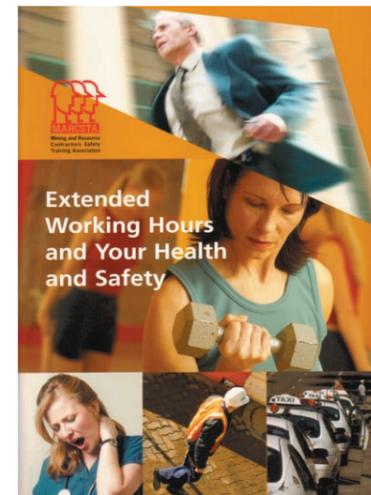
In the study, 25 highly trained swimmers were asked to perform six maximal-effort 200 metre swim trials at different times of the day.

The results showed a clear superiority in performance in the afternoon/evening compared to the morning.

The peak performance occurred at 11:00 pm and the worst results between 2:00 am to 8:00 am.

In a highly competitive world of sports, where financial stakes are high, athletes gain an advantage by phasing their circadian rhythms to the evening.

Source: Circadian Technologies, Managing 24/7



Training provider Paul Willoughby

Paul initially began his exposure to aspects of the mining industry at 23 years of age through the Army engineering corps, completing various civil construction projects.

Naturally, this led to a direct progression into the industry, where he started working in surface mining operations based in the Pilbara.

After fulfilling these base requirements for a few years, he then moved to the Murchison region to work on underground projects, including long hole drilling and development, production and development blasting and operating all associated equipment in a mechanised mining environment.

At this time, he also became a member of the on-site emergency response team focusing on training and assessing personnel, based on military experience in similar areas.

"Every person has the right to finish work each shift fit and healthy to enjoy life."

Other roles included internal auditing of safety management systems for mining organisations.

"I have seen many developments over the time I have been with the mining industry, but the biggest changes affect safety awareness, training and assessing individual competency," Paul said.

"This is why I became involved in safety training and assessing – to raise awareness – every person has the right to finish work each shift fit and healthy to enjoy life."

Paul is currently a trainer at Aveling.



news and views

INFORMATION ON GENERAL NEWS AND VIEWS WITHIN THE MINING INDUSTRY, BOTH NATIONAL AND INTERNATIONAL.

In *Australian Mining* for December 2006, Jamie Wade argues for OHS system reform, reducing the number of OHS authorities, and legislating for incentives for prevention, not just "after the event" penalties. Tom Cudahy explains how Cindy Long of CSIRO is developing hyperspectral sensing to measure spread of dust from mines, and Matthew Clements reviews fibre-reinforced shotcrete for ground support along with Ian Hulls' ten things to consider and FAQs on the same topic. There are also many pages on *Australian Mining's* yearly awards, including one for excellence in OHS for the BHPB Mitsubishi Alliance at Blackwater. Another was awarded for the third year in a row to Matthew Gill, manager of Beaconsfield. Other items of interest are Marsh Mellow vibration isolators from AIR Springs Supply, Chicago Pneumatics' shock-reduced air hammer, Brady Australia's adjustable gate valve lockout, Technofast's solution for tensioning bolts which lack enough protruding thread, and Sunshine Technologies RFID "chip in the helmet" spares tracking device.

Mining Magazine for September 2006 has Paul Moore's 7 page review of robominers.

Mining Magazine for January 2007 notes DBI-Sala's lightweight portable rescue davit system, Marubeni-Komatsu's hydraulic safety rails and walkways for mobile equipment which won a UK HSE award, and also has 6 page reviews on shotcreting, and mineral labs.

CIM Magazine for November 2006 includes Heather Ednie on reducing ventilation costs, Andrea Nichiporuk with a history of Canada's Thetford asbestos mines (if a little reticent about the health impact), and two articles on early mining history in Cornwall and early steelmaking in France.

Queensland Government Mining Journal for September 2006 discusses the ILO draft code of practice for underground coal mines, while the December edition has a report by Sue Leveritt on a meeting of six global mining companies and six major manufacturers to improve human factors design of earthmoving equipment, Stewart Bell discusses an exchange visit to China, and a Blundstone advertorial has interesting pictures of tests of protective boot caps.

Australian Journal of Mining for November-December 2006 mentions Professor Hope who is working to replace cyanide with thiosulfate in gold extraction, Skipp Williams on the role of safety in improved performance, and a feature on mine fatalities in which 92% of respondents to a survey by the Consulting Engineering Association of Australia noted the absence of OHS in their undergraduate course or its inclusion only as part of a unit.

In *AusIMM Bulletin* for November-December 2006, Monika Sander summarises the findings of an inquest on a dump truck tyre fitting fatality, while there are also two pages on a Klinge Tyrearm formal safety assessment of tyres. Philip MacMahon and co-authors review mine and plant maintenance. There is also an obituary on Ted Davies, an Australian mining safety expert, who died at 81. "Safety is a state of mind in which one is aware of the possibility of injury at all times" he said, reflecting Dr Neil George's earlier words from Quebec.

Changes to the training agenda

New improved quality arrangements for vocational education and training will come into effect nationally from 1 July 2007.

Information sessions are being conducted around Australia to explain:

- revised essential standards for registration of RTO's
- the outcomes based approach to audit
- the recognition of high quality performance

Rationalisation and consolidation of RIISC training packages, civil construction, coal mining, drilling, metalliferous mining and construction (extractive industries) is underway and is expected to be completed by December 2008.

The intention is a major consolidation of similar groups of units into one - a long overdue and essential exercise.

MARCSTA visitor

Associate Professor Fan Yunxiao visited MARCSTA in February for a discussion with the CEO, Pat Gilroy. She had completed a MARCSTA General Induction at Aveling a day earlier as the first step in observing how OHS is taught and applied in practice in Australia.

Professor Fan has translated the book Enhancing Occupational Safety and Health, and has also written another one. She teaches safety engineering at the China University of Geosciences in Beijing.



Professor Fan Yunxiao



Who's who?

Chief Executive Officer

Patrick Gilroy AM

Chairperson

Joe Maglizza

Rinker Australia Pty Ltd

Vice Chairperson

Ross Graham

Komatsu

Committee of Management

Allaine Coleman

Terry Condipodero

Peter Nicholls

Peter Luobikis

Arlene Roe

Kim Stewart

MARCSTA Monitor Editor

Geoff Taylor

Fatalities around the world

CHINA

China's top safety official has blasted 'unscrupulous' mine owners and local officials after a string of incidents killed at least 88 miners in four accidents over one weekend in December 2006.

He said one accident which killed 32 miners in a gas explosion should never have occurred because the mine was ordered to be closed by his agency and the provincial government at the beginning of 2006.

Government statistics put the number of coal mine deaths at about 6,000 last year but the real figure is much higher due to cover-up of accidents by local officials and mine owners.

COLOMBIA

Thirty two miners were killed in a makeshift coal mine in remote northeast Colombia on February 3rd when an explosion occurred some 1300 feet underground.

Rescuers had to battle dangerously high levels of methane and other toxic gases.

SOUTH AFRICA

South Africa's Mining Health and Safety Council has reported that while there was a 26% drop in mining fatalities in the platinum sector in 2005/06, gold mining's figures worsened.

The Acting Chief Inspector of Mines said that while the gold mining sector employed 35% of the country's 155,000 mineworkers it was responsible for 51% of the fatalities and 56% of all injuries. Fatalities in the gold mining sector totalled 104 of the total industry number of 202.

The increase was attributed to mining leases revisiting dangerous mines following the increase in commodity prices.

AUSTRALIA

In NSW in January a miner sustained fatal crush injuries at an underground metalliferous mine while operating a remote control loader.

In February in WA a fatality occurred in the Murchison district when unloading dump truck tyres.

A further two fatalities were recorded in March in the Pilbara region following a cyclone.



MARCSTA licensed training providers

Mark Adam
Jayson Aveling
Graham Bailey
Ron Baker
Tom Bateman
Carl Berglin
Danny Bogнар
Clive Brindley
Scott Clarke

Dale Cocker (U) (S)
Jim Dandie
Geoff Day
Peter Dowding
Joe Duyvestyn
Linda Elezovich
Ross Graham
Gary Green
Ray Hargreaves

Jeffrey Hickin
Ralph Keegan (S)
Rob Lewis
Joe Maglizza
Les McIntyre
Neil McMeekin
Guy Mead
Katherine Montague
John Preston

Merryn Richards
Jason Roberts
Victor Roberts
Shane Salt
Grant Shearwin
Brian Smith
Marcus Taylor
James Titmus
Peter Tynan

Anne-Marie Widermanski
Graham Williams
Paul Willoughby

All training providers listed above provide general inductions.
U denotes the underground program.
S denotes the extended working hours program.

Conferences and courses

CIM Conference and Exhibition (Mining and Energy), Montreal. 29 April - 2 May 2007. See www.cim.org

Uranium Conference, Darwin, 15-16 May 2007. Email: conference@ausimm.com.au Fax: 03 9662 3662

Iron Ore 2007. Sheraton, Perth. 20-22 August 2007. Email: conference@ausimm.com.au Fax: 03 9662 3662

Explo 2007. Rydges, Sydney. 3-4 September 2007. Email: kpocock@ausimm.com.au Fax: 03 9662 3662

World Sleep 07, Cairns, 3-6 September 2007, www.worldsleep07.com

World Gold 2007, Cairns. 22-24 October 2007. Email: conference@ausimm.com.au Fax: 03 9662 3662