

MONITOR

Official publication of the
Mining and Resource Contractors Safety Training Association

Research to determine the efficacy of MARCSTA's General Safety Induction training

A COMPREHENSIVE STUDY CARRIED OUT BY IAN DOUGLAS OF EDITH COWAN UNIVERSITY TO EVALUATE THE RESPONSE OF TRAINEES TO THE GENERAL SAFETY INDUCTION TRAINING PROGRAM HAS YIELDED SOME IMPORTANT AND FAR REACHING FINDINGS. THE FULL STUDY FINDINGS WILL BE AVAILABLE ONLINE IN THE NEAR FUTURE.

An indication of the relevance of the study was the answer by trainees to the first research question which asked whether they perceived the General Safety Induction in a positive or negative way. Some of the responses were as follows:

97% found the training manual of high quality.

90% considered the course made them more aware of industry hazards and that the training outcomes had been clearly explained and met and the teaching examples provided easy to comprehend.

91% considered the course was value for money spent with 75% happy with the length of the program although an additional 20% would have liked it to have been longer.

The research is unique in that it was conducted independently with the recipients of the training. It is a valuable in-depth study which will have consequences for training outcomes, the focus of the revised standards for RTO's which will take effect from 1 July.



Ian Douglas

Catherine Stedman Award

THIS AWARD HONOURS THE MEMORY OF CATHERINE STEDMAN WHO MADE A MAJOR CONTRIBUTION TO THE ESTABLISHMENT OF MARCSTA.

Joe Duyvestyn was the winner of the Catherine Stedman Award for excellence in training for 2006.

He is pictured receiving the Award from the State Mining Engineer, Martin Knee at the Annual General Meeting of MARCSTA.

Joe's commitment to quality in training and to the welfare of his students over the past ten years has been outstanding and he is a worthy recipient of this award.



MARCSTA training packages...

As a Registered Training Organisation, MARCSTA delivers occupational safety and health units of competency for the following national training packages: (Applications for recognition of prior learning may be lodged for all training programs)

**Metalliferous Mining
Transport and Distribution
Business Services
Resources and Infrastructure Skills
Safety Awareness Training (Construction)**

In this issue...

Why safety training may not be the answer.....	2
Editorial.....	3
MARCSTA to supply OHS training to whole of Government.....	3
National mine safety framework.....	4
WA mining industry safety performance	4
Queensland mines review	4
MARCSTA members.....	4
Work related alcohol & drug use.....	5
Serious injuries in mining industry 2005-06.....	5
Fatalities in the Australian workforce.....	5
ISMSP.....	6
High court gives go-ahead for companies to move to Comcare.....	6
Rotating equipment accidents ...	6
Teachers in pre-schools noise exposure	7
Workers' compensation awards on the rise	7
Time for workplaces to act on mental health	7
Urgency of countering obesity.....	7
Emergency evacuation for people with disabilities	7
New IOSH OH toolkit.....	7
Notes for the shift worker.....	8
Nanotechnology safety.....	10
News and views	11
Around the world.....	12
MARCSTA licensed providers.....	12



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

Why safety training may not be the answer

FOLLOWING IS AN EXTRACT FROM AN ARTICLE BY DAVID MACHLES PUBLISHED IN THE APRIL EDITION OF OCCUPATIONAL HEALTH AND SAFETY.

Imagine you are ill and make an appointment with your physician. You walk in the door, register with the receptionist, and are escorted to an exam room. A few minutes later, the physician walks in with a syringe filled with medicine. He asks you to roll up your sleeve. As your eyes widen, you exclaim, "You haven't even examined me yet!" As he walks closer with the syringe, he replies, "That's all right. Most of the time, this usually does the trick."

How many times have we approached a safety problem with a "syringe" full of training without diagnosing the underlying issue?

To throw training at a performance problem when there are other issues hampering performance is an ineffective use of your resources. In addition to the direct cost of the training, indirect costs such as taking employees out of production to attend can be substantial. To determine the correct fix, you need to get to the root of the performance problem before you offer training.

Simply stated, a performance problem exists when employees do not do what the organization and management want them to do. While certainly performance problems can and do arise from a lack of training, often they don't. As a general rule, training should be considered only after all other issues affecting performance have been addressed. **In other words, training should be the last consideration and not the first.**

In fact, providing training when the problem does not stem from lack of training may even work against you. **Training or telling employees how to do something when other organizational barriers prevent them from doing it will create resentment.** For example if employees are not wearing required personal protective equipment, will just telling them why they should or training them to wear it really

make a difference? Perhaps the PPE is not readily available or maybe it is uncomfortable and interferes with their ability to perform their job. More training is just going to add salt to the wounds.

Getting to the root of the problem

Regardless of what is the final solution, **the first step in addressing a performance problem is trying to understand what is actually causing the gap.** Skipping this step is what often brings us to the quick-fix training solution. We make the assumption that we know the reason for the gap and decide the employees don't "get it," so we send them to training.

Getting to know the reason for the gap is sometimes called a needs assessment or gap analysis and can be performed in a number of ways. **The most frequently overlooked approach is simply asking the employees why the desired performance is not being done. Surprisingly, they may just tell you. How you approach these interactions will depend on a number of factors.**

A couple of words of caution should be considered before you begin. **First, if you are going to ask employees their ideas and if they tell you, then you need to at least address the issue. Asking people and then ignoring what they tell you will create even more resentment. If you don't plan on sincerely addressing the issue, then don't ask the question, and you can probably stop reading this article.**

Second, you may hear something you don't like or want to believe. While this may not necessarily occur, you need to understand that, if it does, you have to address that issue as well, and in a way that is non-defensive. This feedback, though painful, is huge and valuable. **Anyone who has done considerable training will know that the negative feedback provided in the evaluations is always the most helpful.** Your accepting and addressing problems that may exist in

your own backyard will demonstrate to employees and management alike that you are sincere and committed to making an improvement. If you ignore them, the doors of acceptance for others will close, as well.

Don't assume the problems are all yours, however; just be prepared in case some of them are.

To get to the root of a performance problem, you should use the same objective approach you do when conducting accident investigation, which is getting at the root cause without being judgmental or placing blame. **You should question a variety of employees, but particularly get input from seasoned, well-respected employees. When you get the feedback from these employees regarding the performance problem, you need to consider getting these same employees involved in the solution, as well.** They often have solutions but perhaps have never been given the opportunity to express them.

Using focus groups

Formal focus groups can be another good approach.

Some issues may need to be brought to upper management for approval. Another technique allows participants to put all issues on the table. In this technique, you allow all of the participants an opportunity to write down their issues on paper. Then have each person give one concern as you write it on an easel board. After going completely around the room, go around again. Continue this process until every issue is on the board.

Once all issues are up, begin grouping or clumping them together. Allow the consolidation process to be conducted by them, not you.

The value of personal observation

The next time you encounter performance issues, try digging a little deeper. Don't find yourself overlooking this important first step and making the assumption that "everyone just needs more training."

Source: <http://www.ohsonline.com/articles/46549>

Editorial

The problems one mining company has experienced with lead contain within them an important lesson. Some years ago I advised a somewhat reluctant mine manager that he needed to consider what happened to materials used to make the product while they were on their way to site. I didn't intend to suggest responsibility in the formal legislative sense; that remained with the transport company. My concern was that things could go wrong during transport, such as a serious spill or vapour emission during delivery of those materials. If such an incident had a serious public impact, that in turn could have a big knock-on effect on mine operations. For example, a serious incident could lead to suspension of transport of vital materials, while an inquiry was conducted. Clearly the situation in Esperance, which has led to a suspension of mine operations and serious loss of earnings, has indicated a similar need for a mine to be concerned with what happens after product leaves the minesite. Had lead as a classic OHS problem partly dropped off the public and professional radar in WA, since the introduction of lead-free petrol, and the demise of lead-acid battery making?

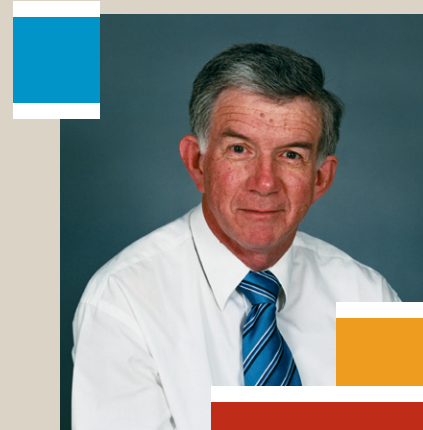
On another note, at a recent MARCSTA training providers' forum, Dr Russell Docking said that more changes had been made to the Australian Quality Training Framework. Ten years after it was relegated by the training ideologues to the back pages of unit descriptors, knowledge is now being allowed back into the performance criteria. The second change for the good is that there has been a realization that paper trails alone do not a good trainer make, and so the auditing of RTOs has been made more flexible. I have seen the thickness of hard copy application papers for RTO status including explanations grow from about 4mm to about 12mm. So amen to that change too.

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

It was interesting too to hear the reactions of experienced trainers with consistent client ratings of 75% and above to the additional requirements now imposed to obtain the new trainer qualifications.

They were that very little of value was gained in undertaking the additional requirements.

With this issue I have now been editor of The Monitor for nine years, very ably assisted by Pat Gilroy in providing a lot of material. I am thinking however that it is perhaps time for new blood for The Monitor. Looking back to the first issue I edited, it shows among other things TRACMIN providing the first MARCSTA course in Tasmania at the Beaconsfield gold mine. There have been many other equally positive developments since that time including aligning the general induction to the national training package, and increasing the scope of MARCSTA as an RTO in a number of new directions, including working hours management, risk assessment, and OHS procedures, and not just in mining but in transport and construction.



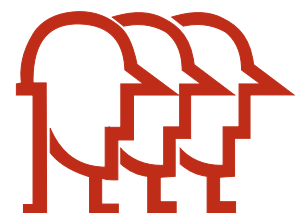
Monitor Editor,
Geoff Taylor

MARCSTA to provide OSH training to the whole of Government

MARCSTA has been awarded a contract to provide occupational safety and health training to supervisors and managers for the whole of Government and approved users for a two year period commencing 1 August 2007.

The decade of quality occupational safety and health training developed and provided by MARCSTA has been recognised by Government and the training will be flexible to meet the needs and circumstances of individual organisations.

All training will be conducted utilising adult learning principles and the experience of selected licenced training providers.



MARCSTA
Mining and Resource
Contractors Safety
Training Association

National mine safety framework - the drive for greater consistency

The Federal Government is pressing ahead with a framework that will deliver greater consistency in mine health and safety regulations with the first three strategies available for comment on a special website.

Submissions close on 20 July 2007 and can be submitted either on line or hand written. The strategies are:

- a nationally consistent legislative framework
- a consultation protocol – aimed at ensuring effective communication between stakeholders at the workplace, and
- a national data set – aimed at ensuring consistency in data collection and analysis.

Running alongside the strategy development is the NSW Mine Safety Advisory Council project to address the major recommendations of the Wran Mine Safety Review.

Three current project topics under consideration are:

- production bonus payments and safety based incentive schemes
- fatigue management and working hours in the mining industry, and
- OHS management system connect and consultation.

Western Australia's mining industry is indeed fortunate in having a well established occupational safety and health regime which has consistently demonstrated that it leads the way both in Australia and overseas.

For further information see www.industry.gov.au/minesafety

WA mining industry safety performance pays dividends

Recommended premium rates for worker's compensation have again been reduced for mining with an overall industry reduction of 12.35%.

Mining continues to be the outstanding performer with premium rates for most sectors less than half of most industrial sectors.

The iron ore sector is the standout performer with a premium rate of 0.4% which is less than that applying in most categories of business services.

131	Metal Ore Mining	
13110	Iron Ore Mining	0.47
13120	Bauxite Mining	1.28
13130	Copper Ore Mining	1.46
13140	Gold Ore Mining	1.45
13141	Gold Mining Underground	3.04
13150	Mineral Sand Mining	1.17
13160	Nickel Ore Mining	1.55
13170	Silver-Lead-Zinc Ore Mining	1.53
13190	Metal Ore Mining n.e.c.	1.31

Queensland mines review

QUEENSLAND MINES MINISTER, GEOFF WILSON, HAS ORDERED AN INDEPENDENT REVIEW OF HIS DEPARTMENT'S QUEENSLAND MINES AND QUARRIES SAFETY PERFORMANCE AND HEALTH REPORT.

Following discussions with the Queensland Minerals Council, mining companies and unions, he concluded that some of the statistics did not accurately reflect the safety performance of some mines.

The Minister has requested an independent review of the report by respected mine safety specialists.

"One of the unions' concerns related to the *Queensland Mines and Quarries Safety Performance And Health Report*" he said.

"They felt that some of the statistics in the report did not accurately reflect the number of safety incidents in some mines."

Source: AAP

MARCSTA members

ORDINARY 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
Total Corrosion Control
Westrac Equipment Pty Ltd

ASSOCIATE MEMBERS

AVELING
Jako Industries Pty Ltd
Mandurah Safety and Training Services Pty Ltd
Mine SafeGear
QFS Australia Pty Ltd
Safety First Risk Management

Work related alcohol and drug use

An ASCC report has questioned the clear evidence of links between drug use and absenteeism, low productivity, poor performance and accidents at work.

The report concedes that there is very good evidence to support the efficacy of roadside random breath testing but considers that there is little robust evidence on the deterrent effects of drug testing for either illicit drugs or alcohol in the workplace.

Key Messages

- People in the workforce are more likely to have consumed alcohol or illicit drugs in the past 12 months than people who are not in the workforce.
- Contrary to popular opinion, the greater costs to employers do not arise through the behaviour and habits of alcohol and drug dependent workers, but through the greater number of moderate drinkers when they occasionally or infrequently drink to excess or infrequently use illicit drugs.
- The impairment that comes from both acute and chronic symptoms of alcohol and illicit drug use could lead to occupational health and safety issues for both the workers who consumed these products and other people they work with.
- Considering the length of time that people spend at work, the workplace is ideally situated to change attitudes and behaviour in regards to alcohol and other drug use.
- A workplace policy on alcohol and drug use should be developed in consultation with all members of the workplace, apply equally to all levels, clearly state what is acceptable behaviour and the consequences of any unacceptable behaviour and be clearly communicated to all members of the workforce.

Source: *Work-Related Alcohol and Drug Use, A Fit For Work Issue, Australian Safety and Compensation Council, March 2007*

Serious injuries in the mining industry 2005-2006

SERIOUS INJURIES REMAIN A MAJOR CONCERN WITH NO INDICATION OF A CONCERTED EFFORT TO REDUCE THE INCIDENCE.

An interesting observation is the correspondence of the major causative factors with those of the national fatality incidence reported by the ASCC.

Many of the leading causes of fatalities are represented at comparable levels e.g. falls, hit by moving objects, motor vehicle accidents and being caught between stationary and moving objects.

The standout causative factor for serious injuries is, however, manual handling which contributes almost 30% of injuries which, while not generally resulting in fatalities, can have lifelong consequences for those injured.



Fatalities in the Australian workforce

The latest fatalities report from the ASCC shows that there were 76 notified work-related fatalities between July to December 2006.

The most prevalent causes were falls from height (17), being hit by falling objects (14), being hit by moving objects (12), vehicle accidents (8) and being trapped between stationary and moving objects (7).

Four industry sectors accounted for just over two-thirds of the notified fatalities, 22% in construction, 16% in agriculture, forestry, fishing, 16% in transport and storage and 13% in manufacturing.

Source: *OHS Repts SafetyNetJournal, Jun 2007*

New rules for high risk work to apply in October

The new national standard for licensing persons performing high risk work will take effect in Western Australia in October 2007.

It will replace the current Certificate of Competency with a 'licence' renewable every five years and covering all work currently considered to be high risk.

Scaffolding, dogging and rigging, and crane, hoist and pressure equipment including forklift operation are included.

Existing Certificate of Competency holders will have up to five years to get their certificate converted to a licence.

Further information can be obtained by telephoning WorkSafe on 9327 8728 or on the website www.worksafe.wa.gov.au.

A MAJORITY OF MEMBERS HAVE VOTED TO DISSOLVE THE SOCIETY

The Management Committee have recommended that the Association be wound up at 30 June 2007.

It considers that the time and work constraints currently being placed on members leaves little time for participation and involvement.

An additional concern is the current revision of the Associations Incorporation Act which will result in increased administrative costs necessary to maintain registration.

The Committee have also recommended that the remaining Association funds be gifted to the Jim Torlach Commemorative Fund to provide support for tertiary students in the occupational health and safety discipline.

ISMSP gratefully acknowledges the contributions of

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

High court gives go-ahead for companies to move to Comcare

The High Court has upheld the decision by the Federal Government to grant self-insurance licences to large companies, allowing them to opt out of compulsory state workers' compensation schemes.

This means companies now or in future self-insuring under the Comcare system are now also subject to the commonwealth OHS Act and regulations.

Dissenting Justice Michael Kirby said the result was another example of blatant federal "intrusion".

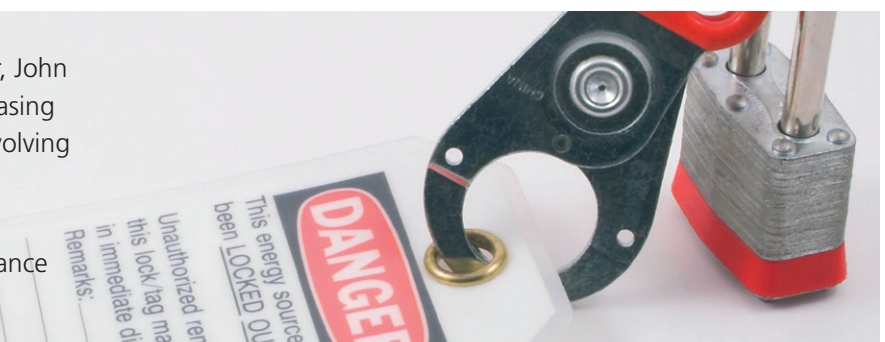
The decision is expected to increase the number of applications for self-insurance under Comcare.

Companies which can move to Comcare and the *Commonwealth Occupational Health & Safety Act* are only those which are former government business enterprises or those who are in competition with GBEs or former GBEs, so the move to national OHS coverage for nationally operating companies is not as extensive as that permitted in Canada.

Rotating equipment accidents continue to occur

WorkSafe Victoria's Executive Director, John Merritt, has drawn attention to the increasing number of deaths and serious injuries involving rotating equipment.

Loose clothing and a failure to isolate equipment prior to carrying out maintenance are contributing factors.



Teachers in pre-schools noise exposure

Researchers in government pre-schools in western Sydney have found that 36% of the teachers were exposed to a peak noise level exceeding the exposure standard of 140dB, equivalent to an ambulance siren. In addition, 40% had an average exposure over their working day of just below or just above 85dB – the exposure standard set to prevent noise-induced hearing loss.

This level of noise all day has been shown to contribute to elevated stress, high anxiety, increased annoyance, depression and fatigue.

Source: Psychological effects of classroom noise on early childhood teachers, L Grebennikov and M Wiggins, University of Western Sydney

Workers' compensation awards on the rise

Two recent awards, one in Australia for \$1m for lung cancer deemed caused by inhalation of hexavalent chromium at Sydney Airport, and one in the UK for A\$2.30m for asbestos-related lung cancer for an electrician working in close proximity to insulation fitters, herald a new phase in compensation for hazardous substance exposure.

Employers will need to be vigilant and ensure employees are not exposed to hazardous materials particularly where the consequences of the exposure may not be evident for lengthy periods of time.

Time for workplaces to act on mental health

In 2006 the Mental Health Council of Australia called on Australian employers to provide early intervention and treatment for workers with health problems.

A recent survey has indicated that mental health problems cost Australian businesses more than \$6.5b a year, highlighting the lack of workplace services and early intervention programs addressing mental health.

The report estimates that 5% of employees at any point in time have a diagnosable mental health problem for which they are not receiving treatment at a cost to employers of more than \$9,000 per annum for every worker not seeking treatment for depression and anxiety.

Source: Mental Health Council of Australia, Media Release, 1 May 2007

The urgency of countering obesity

An Australian Institute of Health and Welfare report has warned that rates of type-2 diabetes will surge in the next 15 years to rival cancer and heart disease as Australia's major diseases.

The report warns that as the population gets fatter and older, lifestyle issues will catch up with us as will diseases such as dementia and osteoarthritis.

Curtin University's Professor of Health Policy, Mike Daube, anticipates a growing epidemic of diseases caused by obesity in less than 20 years including dementia and osteoarthritis.

Source: The West Australian, 25 May 2007, P13



Emergency evacuation for people with disabilities

The US National Fire Protection Association has developed a new guide that provides general information to assist in identifying the needs of people with disabilities related to emergency evacuation planning.

The guide addresses the need for evacuation plans to include everyone, and highlights the needs, criteria and minimum information required to incorporate appropriate planning strategies for people with disabilities into these plans.

Source: ohsonline, 10 April 2007



New IOSH occupational health toolkit

Europe's leading body for health and safety professionals has produced a new, free, occupational health toolkit which brings together information, guidance, fact sheets, case studies, training materials, presentations and more to help tackle occupational health problems.

For further information visit <http://www.ohtoolkit.co.uk/>

Source: TUC Risks, 300, March 2007



Issue 2/2007

Notes for the Shift Worker

Clue to human immune response to sleepiness

Most people are aware that lack of sleep can lead to low productivity, moodiness and an increased risk of motor vehicle crashes but many are unaware that sleep loss is also associated with a higher susceptibility to viral illness, diabetes, obesity and heart disease.

Researchers at Stanford University have found that sleep loss and illness may be a two-way street in research with fruit flies. When fruit flies are exposed to a bacterial infection they experience disrupted sleep and lose their normal patterns of day and night activity - when they get sick they stop sleeping.

This disruption to sleep in turn disrupts the immune system, which makes them even more infected and it's downhill from there in a spiral of death.

The research provides further evidence of the consequences for humans who are sleep deprived.

Source: National Sleep Foundation Alert, 22/5/07

Sleep deprivation and gambling

New research shows that sleep deprivation poses a dual threat to gamblers, first by impairing their ability to judge risk and also then impeding the brain's ability to learn emotionally from the consequences of loss.

The results showed that, when sleep deprived, subjects chose riskier options on two gambling tasks and demonstrated reduced activity in the part of the brain that would normally help them to learn from their mistakes.

The research also suggests that "sleeping on" big decisions might be an important way to improve your odds of success in many other situations.

Source: National Sleep Foundation Alert, 22/5/07

REM sleep behaviour disorder

A new study has found that many people with REM sleep behaviour disorder (RBD) may actively be exhibiting the early stages of neurodegenerative diseases such as Parkinson's Disease or dementia.

RBD is a condition in which patients violently act out their dreams during REM sleep, putting themselves and others at risk of injury. For people with RBD the paralysis that normally accompanies REM sleep is incomplete or absent, making sleep extremely unsafe.

Sleep facts

- This year drowsy driving crashes will kill more than 1500 Americans and injure 71,000 more with a cost to the economy of more than US\$12.5 billion according to the US National Sleep Foundation.
- A new study of 219 workers looking at the relationship between smoking and gum disease has shown that the amount of sleep a person gets impacts on oral health.

The study examined the health status and lifestyle factors e.g. exercise, smoking, stress and loss of sleep, of 219 workers first in 1999 and again in 2003.

The results showed that the two most significant variables for the development of periodontal disease were smoking and the lack of sleep.

Simple lifestyle changes such as getting more sleep may help patients improve or protect their oral health, said the president of the American Association of Periodontology.



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 price of a bed

The US Sleep Products Association has revealed that since 2000 sales of premium-priced mattresses have increased by nearly 40% with over US\$6.4 billion in sales in 2005.

Several mattress companies have been selling ultra-luxury beds that cost as much as US\$60,000. Wealthy baby boomers are thought to be the cause.

Circadian suggest that it would be a much wiser and cheaper investment to educate shiftworkers on strategies to improve sleep quality and quantity.

Source: National Sleep Foundation Alert 17/5/07

Air traffic controller fatigue contributes to accidents

Investigators have called on the Federal Aviation Administration to revise work schedules and take other actions to prevent controllers from becoming tired on the job.

This follows evidence that fatigue contributed to four aviation mishaps in recent years.

The FAA said it will look at scheduling practices but said that many of the schedules have been put in place at the request of employees.

White noise and sleep

White noise is a mixture of sound waves extending over a wide frequency range. It is commonly generated by engines, computers and machinery.

Depending on where you are, it can be a problem or a solution.

At work, white noise can lull you to sleep, especially if you are struggling to stay alert during the overnight hours.

But at home, white noise offers benefits because it masks outside noise that can interfere with sleep.

Many shiftworkers use fans as white noise devices to drown out noise during the day.

Source: Working Nights, June 2007

Sleep disorders for dummies

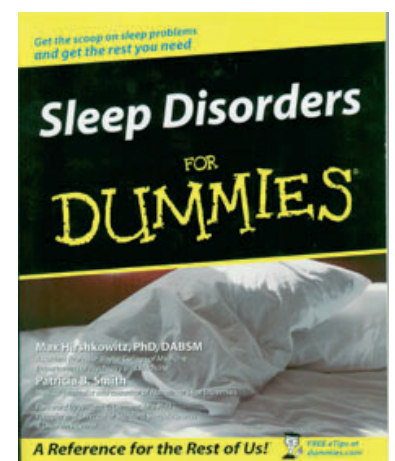
Can't sleep? Not sleeping soundly? This reassuring guide offers solid advice on the different sleep disorders and what you can do to get a good night's rest. From narcolepsy to night terrors, you'll see how to prevent and manage sleep problems and get proper treatment. There are also savvy tips on preventing jet lag and getting kids to bed without fuss.

Discover how to:

- Get an accurate diagnosis
- Find relief from your symptoms
- Locate a sleep lab
- Handle your child's sleep disorder
- Turn your bedroom into a sleep sanctuary

Covers insomnia, sleep apnea, and restless legs. Improve your sleep habits, manage stress, and get your sleep.

Source: Working Nights, June 2007



Framework developed for nanotechnology safety

"NANOTECHNOLOGY HAS THE POTENTIAL TO UNLEASH INNOVATIONS IN MATERIALS ENERGY AND OTHER FIELDS THAT COULD LEAD TO POWERFUL ENVIRONMENTAL AND HEALTH BENEFITS." GWEN RUTA, DIRECTOR OF CORPORATE PARTNERSHIPS AT ENVIRONMENTAL DEFENSE

In September 2005 the USA Environmental Defense and Dupont created a multi-disciplinary team of expertise in science, engineering, law and business to develop a systematic and disciplined process for evaluating and addressing the environmental, health and safety risks of nanomaterials across all stages of a product's life cycle - from initial sourcing through manufacture, use and recycling.

In June they released a comprehensive framework to assist with the responsible development and use of nanotechnology and to help with the global dialogue on nanotechnology's potential risks.

The framework is intended for use around the world by small and large

companies, regulatory agencies, universities and others with interests in commercialising nanoscale materials.

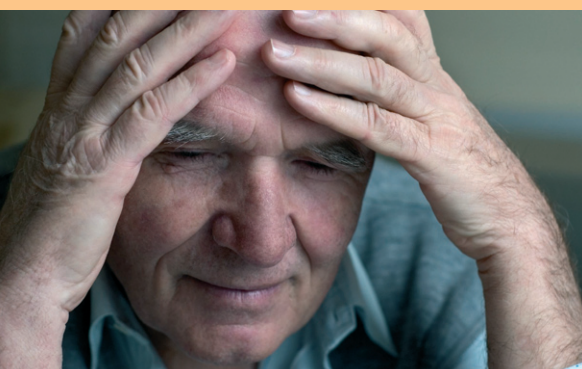
In order to evaluate the effectiveness, flexibility and practicality of the framework, Dupont conducted three demonstration projects on three different classes of nanoscale materials: a new titanium dioxide based product, carbon nanotubes and zero valent iron.

A Dupont spokesman said that each product represented a different position for them in the value chain and is at a different stage of development.

For more information visit www.nanoriskframework.com



Ten symptoms not to ignore



The Mayo Clinic has compiled a list of the ten symptoms that require immediate medical attention because they are likely to indicate serious disease.

- Unexplained weight loss – a common feature of many chronic underlying illnesses, cancers, chronic infections, depression.
- Persistent fever – may mean a chronic underlying infection, cancer or some other illness.
- Unexplained changes in bowel habits – a sign of bowel disease like inflammatory bowel disease or cancer.
- Chest pains.
- Sudden unexplained headaches – especially people over 50. It may signal something serious in the brain like an infection or tumour.
- Sudden loss of function.
- Confusion.
- Shortness of breath.
- Flashing lights.
- Hot, red or swollen joints.

Source: ABC Health Matters, The Pulse. June 2007-06-22



news and views

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

Longwall for March 2007 has articles on meeting new **diesel particulate emissions standards** in NSW, use in the Hunter Valley of the new Minesite Technologies **integrated caplamp** with personal emergency device and tracker tag, the new Kinyun **cordless caplamps** with LED lighting, and Austdoc's new conveyor monitoring system compliant with the EN 61508 safety standard..

In *Mining Engineering* for May 2007 there is comment on the US Mine Improvement and New Emergency Response Act (**MINER Act**) 2006, and a **fatal circuit breaker explosion**. Of particular interest is a partial breakdown of the **lifetime minerals and metals requirements** of a US baby born now, totalling 167,000 tonnes of minerals and energy fuels.

Turning to *Mining Magazine* for May 2007, it notes that the **methane safety system** at Ulyanovska coal mine in Siberia was deliberately disabled, to show a lower methane concentration and prevent a power trip-out, before an explosion which killed 108 workers, including one Briton checking safety systems. It also covers the 100th anniversary of Draeger's move into the US with a **reliable breathing apparatus** for mine rescue, a three page review of **jumbo drills**, a four page review of **underground safety**, and the new techniques Dr Chris Jennings brought to **diamond exploration**.

We find in *Mining Technology* for March 2007 a paper on **psychological predictors of occupational injuries** in Indian coal miners by AK Ghosh and A Bhattejee.

Looking at *Australian Mining* for May 2007 it notes an **independent review of mining safety** in Queensland after accusations of incorrect safety figures being submitted, with a proposal to move to total recordable injuries. It also notes Alcoa's Chamber of Minerals and Energy (CME) Award for a **hammerless drain valve** and also a **wheel spinner** both eliminating the risk of sprains and strains, and Consolidated Minerals/Swick Mining Services' CME award for an improved **drill-rod handling system**, and contains an article on **mine ventilation** by Val Pavlovic.

Mining Journal for 18th May 2007 editorialises against the East West Line Parks proposal for a **coal-iron ore railway** between Queensland and WA, and US General Accounting Office criticism of **inconsistent fines reduction** by MSHA.

Last but not least, *AJM* for March-April 2007 devotes considerable space to **native title** articles by Vickie Smiles and the national Tribunal's Graeme Neate, and has an article by Jeremy Goff on **using "resultants"** not consultants, so that instead of just ideas a company gets skills, habits, processes, systems and procedures which drive continual improvement.



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

Around the world

INITIATIVE TO REDUCE CHINA'S DEATH TOLL

The United Nations has launched a project to improve safety for China's coal miners who average 13 deaths a day.

US\$14.4m will be spent training and educating miners in five provinces where numerous fires, floods and other disasters occur.

China's coal mines killed 4,746 people in 2006 according to the State Administration of Work Safety.

Source: *TUC Risks*, 200, March 2007

UK WORKPLACE FATALITIES ESCALATING

Official figures released by the HSE show that fatalities in the workplace continued to rise in 2006 and could reach a five year high of 250, up 17% on the previous years. Construction workers accounted for 74 of the fatalities, an increase of 14%.

The increase in deaths has been partly attributed to the cuts in resources available to the HSE.

Source: *TUC Risks*, 200, March 2007

OCCUPATIONAL CANCER, MOST COMMON CAUSE OF DEATH

According to a coalition of UK unions, occupational cancer is now the most common cause of death surpassing other work related diseases and accidents. This situation, however, is not being taken seriously enough by the Health and Safety Executive or employers.

A new international work cancer prevention guide being developed in the UK reveals that globally there are over 600,000 occupational cancer deaths a year, making up almost one third of all work-related deaths.

Source: *TUC Risks*, 200, March 2007

DENMARK

A Danish union study has identified high levels of occupational cancers in construction workers which has prompted immediate government action.

Rates of lung cancer and mesothelioma in plumbers, carpenters, joiners and electricians were more than twice the expected level.

The study also found an excess of lip cancers in outdoor workers and some lung and stomach cancers in painters.

The Danish Government has announced a number of initiatives to register cancer cases with the National Board of Industrial Injuries.



MARCSTA licensed training providers

Mark Adam
Jayson Aveling
Graham Bailey
Ron Baker
Tom Bateman
Carl Berglin
Danny Bognar
Clive Brindley
Scott Clarke
Brian Cloney
Dale Cocker (U) (S)

Jim Dandie
Geoff Day
Peter Dowding
Joe Duyvestyn
Linda Elezovich
Ross Graham
Ray Hargreaves
Sheryl Henley (C)
Jeffrey Hickin
Ralph Keegan (S)
Rob Lewis

Joe Maglizza
Les McIntyre
Neil McMeekin
Guy Mead
Katherine Montague
Rodney Pool
John Preston
Merryn Richards
Jason Roberts
Victor Roberts
Shane Salt

Grant Shearwin
Brian Smith
Marcus Taylor
James Titmus
Peter Tynan
Ron Van Baaren (C)
Anne-Marie Widermanski
Graham Williams
Paul Willoughby

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

Conferences and courses

Iron Ore, Perth 20 -22 August 2007. Fax: 03 9662 3662. Website: ausimm.com.au

Third Biennial International Mine Rescue Conference, Nashville, 29 August – 1 September, 2007. See www.msha.gov

Mining 2020, Sydney 5-6 September 2007 in conjunction with AIMEX 4-7 September 2007. Email: agnes.wychodil@reedexhibitions.com.au

International Symposium on Rock Slope Stability, Perth 12- 14 September 2007. See www.rockslopestability.com or contact Australian Centre for Geomechanics

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

China Mining, Beijing, 13- 15 November 2007. Email : info@china-mining.org.

12th US/North American Mine Ventilation Symposium, Reno, 9 -11 June, 2008. Email: mousset@unr.edu

24th International Mine Processing Congress, Beijing 24-28 September 2008. Email: impc2008@impc2008.org