Issue 43 *(February 2016)*

SPOTLIGHT

WSH Institute Visiting Expert Series: Addressing Nanomaterial Risks at the Workplace

The WSH Institute will be organising a half-day Visiting Expert Series session on nanomaterial risks at the Devan Nair Institute for Employment and Employability on 24th February 2016. Listen to eminent speakers sharing on the WSH risks associated with the handling of nanomaterials and recommendations for effective protection against such exposure. Seats are limited, click here to register!

Beyond the Plateau: Visible Safety Leadership by All

The WSH Institute is a supporting partner for the 10th HSE Excellence

WHAT'S TRENDING

RoboWatch Learns Just By Watching YouTube

(Source: Popular Mechanics)

From DIY woodworking projects to hundreds of baking recipes, you can learn almost anything from YouTube. The problem is relying on just a given video for information. But what if you could watch every single video on a given subject and analyse them simultaneously so as to form a more reliable set of information?

That's exactly what a computer program called RoboWatch is designed to do.

More...

Relevance: Can these robots analyse and learn from visual recordings of workplace incidents and propose recommendations to prevent future recurrences?

Company Bets on Catching Cancer With "Liquid Biopsy"

Gene sequencing company Illumina is betting it can diagnose cancer in people long before they have any symptoms at all with a blood test called a liquid biopsy.

Europe Conference in Frankfurt, Germany, on 17th-18th May 2016. More information can be found here.

(Source: NBC News)

More...

Relevance: Can this method be used for the early detection of cancers in workers who are working in environments where the chance of developing cancer is higher?

RECOMMENDED READING FROM THE WSH INSTITUTE COLLECTION*

TITLE:
Monitoring for health hazards at work

AUTHOR:
John W. Cherrie, Robin M. Howie, Sean Semple; with contributions from Adrian Watson

AREA OF INTEREST:
Environmental monitoring
Occupational Diseases -- prevention & control
Air Pollutants

Please use your QR code scanner to access the recommended reading titles on Exposure to Hazardous Substances

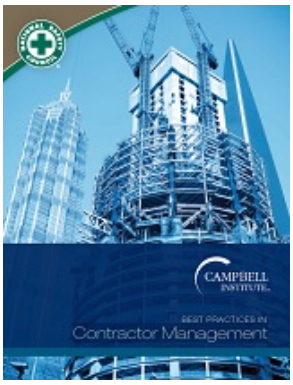
Click here to access WSH Institute's e-books collection.

* The WSH Institute Collection is a compilation of WSH-related resources accessible to the public through our collaboration with the National Library Board (NLB).

OWL HIGHLIGHTS

1 Best Practices in Contractor Management

Date of publication: September 2015
Source: Campbell Institute



This study by Campbell Institute outlined the gaps regarding contractor EHS management and described the best practices and challenges in managing contractor safety. Researchers used a robust approach involving group discussion, content analysis, data collection and interviews and selected 14 organisations with good EHS performance for the project. Findings on best practices and challenges in contractor safety management are summarised below:

Best practices in contractor safety management:

(i) Use third-party prequalifying companies
(ii) Assess contractor safety statistics

(iii) Evaluate risk rating for work to be performed by contractor
(iv) Place general contractors in charge of subcontractor safety
(v) Perform periodic assessments during contract term

Common challenges in contractor safety management:

(i) Lack of formalised structure for disciplinary action
(ii) Lack of formalised post-work evaluation process

To read more, click here

2 The business case for safety and health at work: Cost-benefit analyses of interventions in small and medium-sized enterprises

Date of publication: September 2014
Source: European Agency for Safety and Health at Work

This publication examines the economic aspects of occupational safety and health (OSH) interventions in small and medium-sized businesses (SMEs). First, case studies in the existing literature were identified and examined. Second, 13 new case studies on OSH initiatives in European SMEs were developed, with a business case for each intervention prepared according to a common model. The OSH interventions studied were generally profitable, and these new case studies therefore provide a useful tool to allow owners and managers of SMEs an insight into the potential benefits of improving OSH and the key factors involved in carrying out a cost–benefit analysis. The study states that OSH initiatives can bring out both significant improvements in working conditions and be highly profitable at the same time. Specifically, 3 insights from the report are highlighted. They are:

(i) Broad interventions appear to be more profitable than interventions targeting a particular issue of the industry
(ii) Interventions that include worker participation appear to be more profitable
(iii) Companies in most of the case studies estimate benefits related to increased productivity

To read more, click here

3 Guide to managing risks of exposure to diesel exhaust in the workplace

Date of publication: October 2015
Source: Safe Work Australia

In Australia, about 1.2 million workers were exposed to diesel exhaust in the workplace in 2011. These workers comprise drive-in booth operators, construction workers, oil and gas workers, forklift drivers, truck drivers, farmworkers, stevedores, and vehicle maintenance workers. The major source of workplace exposure to diesel exhaust is from heavy vehicles that use diesel such as trucks, buses, trains, tractors, ships, bulldozers, and fork lift trucks. Short-term exposure to high levels of diesel exhaust can lead to eye, nose, throat and lung irritation or even suffocation while long-term exposure can worsen allergies, increase the risk of heart and lung disease and the risk of lung cancer. This article provides guidance on managing the risks of diesel exhaust exposure in the workplace.

The recommended steps to take are:

(i) Identify where and how workers can be exposed to the harm
(ii) Assess the risks if necessary
(iii) Take action to control the risk, and
(iv) Provide information training, instruction and supervision to workers on health hazards linked to diesel exhaust

The paper also suggests information and training should be provided in a way that is easily understood, as well as the need to minimise the incidental exposure and review risk control measures regularly to make sure they are effective.

To read more, click here

4 Reducing Hazardous Dust Exposure When Cutting Fibre-Cement Siding

Date of publication: 2015
Source: National Institute for Occupational Safety and Health

Exposure to dust containing crystalline silica, found in several construction materials such as brick and concrete, can lead to lung cancer, kidney disease, reduced lung function and other disorders. With the rapid growth of fibre-cement siding in construction and renovation works, the number of workers exposed to dust containing crystalline silica will likely increase. The National Institute for Occupational Safety and Health's (NIOSH) recommended exposure limit (REL) for breathable crystalline silica is 0.5 mg/m3 as a time-weighted average for up to a 10-hour workday during a 40-hour work week. Tasks such as concrete cutting and grinding, abrasive blasting, and cutting fibre-cement siding generate such dust. It has been found that workers can be exposed to breathable crystalline silica of up to 26 times during full-depth pavement repair and up to 8 times during new runway construction. A research project by the NIOSH finds that attaching a regular shop vacuum to a dust-collecting circular saw provided a simple, low-cost solution, stating that it can be very effective and recommends their use. In a pilot study that was conducted, the dust control reduced breathable dust emissions by 93%. The article also includes recommendations related to work practices, site set-up, respirators, personal hygiene, and protective clothing to help reduce workers' exposures to hazardous dust.

To read more, click here

Other Useful Resources

- **Being accident ready: 10 tips for employees** *(Arthur Cox)*
- **Musculoskeletal disorders in the workplace: The role of HR and line managers** *(Personnel Today)*
- **Righting respirator wrongs: Correcting misconceptions for greater respiratory protection** *(Occupational Health & Safety)*
- **High risk of near-crash driving events following night-shift work** *(Proceedings of the National Academy of Science)*

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Visit the *WSH Institute website* for updates on WSH-related matters, information and events.

Vision: A leading Institute for WSH knowledge and innovations.
Mission: Enhancing WSH through knowledge, innovations and solutions.

An Initiative of

OWL
OBSERVATORY FOR WSH LANDSCAPE

The Observatory for WSH Landscape (OWL) is a function of Workplace Safety and Health Institute. OWL aims to observe, analyse and communicate changes in the workforce, workplace and working life to researchers, policy makers and industries in Singapore and Asia.