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SPOTLIGHT

International Advisory Panel (IAP) for Workplace Safety and Health (WSH) in Singapore

The 4th meeting of the IAP was held on 6 and 8 May 2014 at Suntec Singapore Convention and Exhibition Centre. The meeting was chaired by Minister for Manpower, Mr. Tan Chuan-Jin and co-chaired by Senior Parliamentary Secretary for Education and Manpower, Mr. Hawazi Daipi.

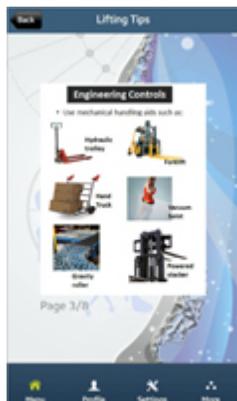


The IAP members discussed two strategy papers - “Vision Zero, The next Frontier”, which outlines the main strategies to achieve a Vision Zero mindset in Singapore, and “Implementing Total WSH”, which

outlines strategies to promote adoption of a holistic approach to managing safety, health and well-being in the workplace.

For more details on the IAP meeting and recommendations, please click [here](#).

What’s New in ergo@WSH mobile app



This mobile app which was developed by the WSH Institute for diagnosing sitting and lifting postures now has a new feature that shows you how to redesign your workstation. It also provides tips on manual lifting.

For existing Android users, Google Play has an upgraded ergo@WSH app with the new features. You may consider downloading the new app and deleting the old app, but the existing profiles will not be imported.

Download ergo@WSH for free from [iTunes App store](#) or [Google Play](#).



Articles Reviewed In This Issue:

1. **Global estimates of the burden of injury and illness at work in 2012**
2. **Evaluation of smartphone sound measurement applications**
3. **Fatal falls from roofs among U.S. construction workers**
4. **A prospective cohort study investigating an exposure–response relationship among vibration-exposed male workers with numbness of the hands**

Global estimates of the burden of injury and illness at work in 2012

Date of publication: April 2014

Source: Journal of Occupational and Environmental Hygiene, 11: 326–337

Author: Jukka Takala, Päivi Hämäläinen, Kaija Leena Saarela, Loke Yoke Yun, Kathiresan Manickam, Tan Wee Jin, Peggy Heng, Caleb Tjong, Lim Guan Kheng, Samuel Lim & Gan Siok Lin

Synopsis:

This article reviews data on employment, occupational illnesses and work-related injuries and ill-health from published sources of international and regional organisations, in particular the International Labour Organisation (ILO), World Health Organisation (WHO) and the European Union (EU). It identifies and analyses successful solutions, programmes and strategies to reduce work-related negative outcomes at various levels. The study finds that globally, 2.3 million deaths take place due to occupational injuries (318,000 deaths) and work-related diseases (2,022,000 deaths) annually. The biggest killers are work-related cancer (32 percent); work-related circulatory diseases such as cardiovascular and stroke (23 percent); communicable diseases (17 percent); and occupational accidents (18 percent). It concludes that key action programmes should concentrate on finding solutions and reducing exposures for illnesses that have a long latency period. A culture based on commitment and capable leadership needs to be developed, and best practices as well as new innovations at the organisation and country levels need to be identified and used. In addition to law and enforcement, and health and safety services, media including social media should be better harnessed for the promotion of safety, health and well-being at work.

To read more, click [here](#).

Evaluation of smartphone sound measurement applications

Date of publication: March 2014

Source: J. Acoust. Soc. Am. 135 (4), April 2014

Author: Chucru A. Kardous and Peter B. Shaw

Synopsis:

This research describes a pilot study to assess the functionality and accuracy of smartphone sound measurement apps; examine the variability of device hardware on the accuracy of the measurements; and determine whether

these apps can be relied on to conduct participatory noise monitoring studies in the workplace. It selected and acquired a representative sample of the popular smartphones and tablets on the market as of January 2013 including iPhone 3GS, iPhone 4S, iPhone 5, iPad 4th generation, Samsung Galaxy S3, Samsung Note, Samsung Focus, HTC One X, and Motorola DROID RAZR.

Smartphone apps were selected based on their occupational relevancy criteria. Findings showed that certain sound measurement apps for Apple smartphones and tablets may be considered accurate and reliable to be used to assess occupational noise exposures; and that Android and Windows developers do not offer apps that meet the functionality needed for occupational noise assessments.

To read more, click [here](#).

Fatal falls from roofs among U.S. construction workers

Date of publication: February 2013

Source: Journal of Safety Research 44 (2013) 17–24

Author: Xiuwen Sue Dong, Sang D. Choi, James G. Borchardt, Xuanwen Wang, Julie A. Largay

Synopsis:

This study seeks to describe trends and patterns of fatal falls at the national level in the United States, and used the information to explore possible solutions for the fatal fall injury problem. Patterns and trends of work-related deaths caused by falls from roofs in the US construction industry were examined by analysing a large national fatality dataset and household survey spanning an 18-year period (1992–2009).

Although overall rates of fatal injuries in the US construction industry gradually declined since 1992, results suggested that the recent decline in roof fatalities was appreciably attributed to the economic downturn during 2007–2009. Roofers, ironworkers, construction helpers, and construction labourers were the four most dangerous occupations with the highest death rates for falls from roofs.

To read more, click [here](#).

A prospective cohort study investigating an exposure–response relationship among vibration-exposed male workers with numbness of the hands

Date of publication: 2014

Source: Scand J Work Environ Health. 2014;40(2):203–209

Author: Edlund M, Burström L, Gerhardsson L, Lundström R, Nilsson T, Sandén H, Hagberg M

Synopsis:

This study aims to investigate the exposure-response relationship of hand-arm vibration exposure to neurological symptoms (numbness) of the hand in a cohort of vibration-exposed workers. The baseline cohort comprised 241 office and manual workers with and without exposure to hand-arm vibration. Numbness (the symptom or event) in the hand was assessed for all subjects at baseline and follow-ups after five, 10 and 16 years.

Results showed that the hazard ratio (HR) of risk of event (numbness) differed significantly between the non-exposed group (group 0) and the two higher exposure groups (groups 2 and 3). There was also a significant hazard ratio difference between the lowest exposure group (group 1) and the two higher groups. The results suggest a dose-response relationship between vibration exposure and numbness of the hands. This underlines the importance of keeping vibration levels low to prevent neurological injury to the hands.

To read more, click [here](#).

Other Useful Resources:

- [Guide to Total Workplace Safety and Health: Holistic Safety, Health and Wellbeing in your company](#) (WSH Council)
- [WSH Guidelines Improving Ergonomics in the Workplace](#) (WSH Council)
- [Be prepared: Five potential welding safety hazards to avoid](#) (OHS Online)
- [Work-related musculoskeletal disorders on the decline in Ontario](#) (Institute for Work & Health, Toronto)
- [Chemical Safety Board ongoing investigation emphasises lack of protection for communities at risk from Ammonium Nitrate storage facilities; Finds lack of regulation at all levels of government](#) (US Chemical Safety Board)