



Issue 61 (March 2018)

SPOTLIGHT

iReference – the key to WSH knowledge



Having problems searching for relevant WSH resources? Have you tried the **iReference** on the WSH Institute website? It is a customised search that allows you to have access to more relevant information on WSH from established and reliable research institutes from around the world.

WHAT'S TRENDING

Outside NIOSH: Computer Model Predicts Wear on Shoes



Slips, trips, and falls are leading causes of work-related injuries. A fundamental part of preventing such accidents is the shoes' tread, which provides friction with the floor. A computer model has now been developed to estimate the impact of shoe design on friction.

[More...](#)

(Source: Centers for Disease Control and Prevention)



Relevance: Findings from this research will be useful in designing slip-resistant shoes to reduce incidents of work-related slips and falls. It may even have the potential to predict when shoes will wear out, so that they can be replaced before becoming a workplace hazard.

Driverless electric buses to be tested from 2019 in collaboration between NTU, Volvo



(Source: Channel NewsAsia)

Autonomous buses equipped with self-driving technologies such as laser systems for charting and detecting obstacles, as well as an integrated navigation system that includes automated steering, gear changing and speed throttling capabilities will be tested in Singapore from 2019.

[More...](#)

Relevance: Autonomous buses

mechanism leading to increased cancer risk with night work. However, the review also suggested that cancer risk may be due to other factors associated with working at night, such as poor diet.



To read more, click [here](#)

2 Consider non-routine safety risks before plant shutdown maintenance

Date of publication: December 2017
Source: EHS Today



Routine plant shutdowns are scheduled in advance and allow time for preventative maintenance projects, in-depth housekeeping, changeovers, upgrades and other time-consuming tasks that are not part of daily operating schedule. However, these tasks scheduled during these shutdowns are usually non-routine and can present different hazards than those faced during normal operations.

Being unfamiliar with these non-routine tasks, employees can easily overlook the safety hazards associated with them. To avoid this, each task should have a clear objective, with safety hazards reviewed and safeguards included in procedures to be followed to safely complete the job. For example, workers who are not accustomed to working in confined spaces need to undergo training prior to the shutdown to help ensure their safety and increase their awareness of confined space hazards.



To read more, click [here](#)

3 Strategies for worksite health interventions to employees with elevated risk of chronic diseases

Date of publication: June 2017
Source: Safety and Health at Work

The modern workforce has become increasingly sedentary. Excessive sedentary behaviour can lead to multiple chronic health outcomes including cardiovascular disease, type 2 diabetes, hypertension, metabolic syndrome, and obesity, which negatively impact workplace productivity and healthcare costs. Hence, workplaces are offering health and wellness intervention programmes to reduce chronic disease progression, absenteeism and healthcare costs.

This study looked at health promotion interventions for employees with elevated risk of chronic diseases and analysed the common intervention and evaluation strategies used when implementing and assessing those interventions. It examined 27 peer-reviewed articles retrieved from online databases.

The findings showed that the most prevalent and feasible format of health promotion interventions were small group education or physical activity interventions. Most of them included educational and informative components, such as group discussion, one-on-one consultation, and health coaching. Others comprise environmental changes where treadmill desks and distributed exercise equipment were installed to facilitate physical activity, as well as providing a cafeteria with low-fat vegan menu options and nutritional information to facilitate healthy diet changes. The growth in mobile device applications and Internet access had increased the number of technology-based workplace health promotion interventions and reduced the common barriers to participation such as time, place, and costs.

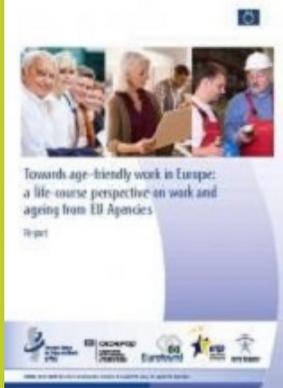


To read more, click [here](#)

4 Towards age-friendly work in Europe: A life-course perspective on work and ageing from EU agencies

Date of publication: June 2017
Source: European Agency for Safety and Health at Work

With an ageing population and workforce, policy-makers in Europe are faced with the challenge to address this demographic change and its impact on employment, working conditions, living standards and the sustainability of welfare states.



This report discussed the different issues and challenges linked to an ageing workforce and related policies. To improve the sustainability of work in the context of an ageing workforce, a proper risk prevention approach is recommended by taking a life-course approach. While addressing the challenges faced by older workers, this takes into account the needs of other groups of workers, ensuring that proposed solutions avoid negative side effects that may 'spill-over' to these groups. A strategic approach to ensure longer and healthier working lives needs to promote improved risk prevention and well-being at work in general. Awareness-raising campaigns and image campaigns can help to avoid stigmatisation and can also motivate people to stay longer in employment.

To ensure the employability of the ageing population, vocational education and training (VET) can contribute to keeping older workers employed, active and skilled. A guidance approach can also be adopted to help individuals of any age identify and reflect on their capacities, competences and interests and to manage their individual life paths in learning, work and other settings. Whilst participation in lifelong learning and tailoring learning approaches to the needs of the individual (older) worker is crucial, validation of non-formal and informal learning is also beneficial and has the potential to increase older workers' self-esteem, reveal particular learning needs and stimulate participation in learning.



To read more, click [here](#)

Other Useful Resources

- Associations of shift work and its duration with work-related injury among electronics factory workers in South Korea (*International Journal of Environmental Research and Public Health*)
- Workplace interventions to improve work ability: A systematic review and meta-analysis of their effectiveness (*Scandinavian Journal of Work, Environment & Health*)
- Artificial stone-associated silicosis: A rapidly emerging occupational lung disease (*International Journal of Environmental Research and Public Health*)
- WHO guidelines on protecting workers from potential risks of manufactured nanomaterials (*World Health Organization*)

OWLlinks is brought to you by **Workplace Safety and Health Institute, Singapore**. **OWLlinks** enables leaders and professionals to keep abreast of the latest WSH development and trends from around the world.

For enquiries or feedback, please email us at contact@wshi.gov.sg
Visit the *WSH Institute website* for updates on WSH-related matters, information and events.

Vision: A Healthy Workforce in a Safe Workplace.
Mission: Provide evidence-based, insightful and practical solutions.

The information provided here is based on information available at the time when this issue of *OWLlinks* was compiled. The information provided here is not to be construed as implying any liability to any party nor should it be taken to encapsulate all the responsibilities and obligations of the reader of *OWLlinks* under the law. Please note that Workplace Safety and Health Institute will be unable to provide full-text of articles listed in this *OWLlinks* if it contravenes the copyright regulation.

If you wish to update your *OWLlinks* profile, please click [here](#).

If you do not wish to continue receiving the *OWLlinks* by email, please click [here](#) to unsubscribe.

An Initiative of



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.