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*OWLlinks is brought to you by the Workplace Safety and Health (WSH) Institute to enable leaders and professionals to keep abreast of the latest WSH developments and trends from around the world.*

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## SPOTLIGHT



Fall from heights is the leading cause of workplace fatalities in Singapore. In order to enhance Work at Heights (WAH) safety, the WSH Council-led national WAH Taskforce has rolled out various initiatives to raise industry awareness and build capabilities for WAH since its formation in August 2009.

For more information about the latest developments in WAH, please check the WSHC website [HERE](#).

To support the national move to improve WAH safety, the WSH Institute is sharing interesting WAH articles in this issue. We hope you find them useful and relevant for your workplace.

### Articles Reviewed In This Issue:

1. **Developing the understanding of underlying causes of construction fatal accidents**
2. **Outcomes of a revised apprentice carpenter fall prevention training curriculum**
3. **Fatal falls among older construction workers**

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### 1. Developing the Understanding of Underlying Causes of Construction Fatal Accidents

**Date of publication:** Mar 2012

**Source:** Safety Science, Volume 50, Issue 10, Elsevier

**Author:** Andrew Hale, Damian Walker, Nicola Walters, Helen Bolt

#### Synopsis:

This paper from the UK Health and Safety Executive (HSE) Construction Division presents a prospective method of analysis that provides new insights on the causal factors of fatal incidents. Information was elicited based on the Human Factors Analysis and Classification System (HFACS) framework. Appropriate modifications were made to include the organisational and ‘system’ (regulatory/market/societal) aspects.

The paper studied 26 construction incidents (with 28 fatal injuries) drawn from the 2006-2008 statistics. Data was obtained from inspectorate reports and structured interviews with investigators. The results showed that underlying factors were mainly associated with the lack of planning, risk assessment, hardware design, purchase and installation, and contracting strategy. These findings were partially validated with another sample of 50 cases analysed earlier by HSE. The method was subsequently developed to enable the factors to be mapped onto a more robust management system model. Such analysis of the underlying causes of fatal injuries can underpin decisions about priorities for prevention and change.

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

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### 2. Outcomes of a Revised Apprentice Carpenter Fall Prevention Training Curriculum

**Date of publication:** Jan 2012

**Source:** Work: A Journal of Prevention, Assessment and Rehabilitation, Vol. 41,

**Synopsis:**

Falls from heights is the leading contributor to fatalities in the construction sector. This article reports on the changes in fall prevention behavior following the revision of a training programme. A comprehensive needs assessment was conducted to identify the gaps in an apprentice carpenters' fall prevention training curriculum. The findings were analysed against the existing fall prevention curriculum by a team of carpenter Instructors and researchers. After changes were made to the curriculum and training intervention, there were overall improvements in fall prevention behaviours, safety climate, and knowledge.

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

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**3. Fatal Falls Among Older Construction Workers**

**Date of publication:** May 2012

**Source:** Human Factors: The Journal of the Human Factors and Ergonomics Society

**Author:** Xiuwen Sue Dong, Xuanwen Wang, and Christina Daw

**Synopsis:**

This study examined trends in fall fatalities in the U.S. construction industry from 1992-2008 to determine whether fatal falls among older workers were different from younger workers in the industry. The study found that falls were an increasingly important cause of occupational fatalities as workers age. Compared with younger workers, deaths among older workers aged 55 and above were 50% more likely to be due to falls than other injuries, after controlling demographic and employment factors. Death rates for fatal falls were also significantly higher for older workers than their younger counterparts in most construction jobs. In particular, roofers, ironworkers and power line installers had the highest risk in fall fatalities for both age groups. Older workers were also more vulnerable to falls from ladders than younger workers, indicating that using a ladder remains a particularly risky task for older workers. Workers employed in small establishments or those who were self-employed were also more likely to die from falls compared to those employed in larger establishments. This could be due to the lack of formal skill and safety training in smaller establishments, and also lack of enforcement of proper fall protection devices for the self-employed whom are not covered by the Occupational Safety and Health Act in the USA.

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

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**Other Useful Resources:**

• [Research and Practice for Fall Injury Control in the Workplace:](#)

Proceedings of International Conference on Fall Prevention and Protection (NIOSH)

• [Code of Practice for Managing the Risk of Falls at Workplaces](#) (Safe Work Australia)

• [Falls from Elevations](#) (ILO Encyclopaedia of Occupational Health and Safety, Vol 2, Part VIII, Chapter 58, Safety Applications)