

Health & Safety Laboratory

An agency of the Health & Safety Executive



HEALTH & SAFETY
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Using our brains to save and improve the lives of workers

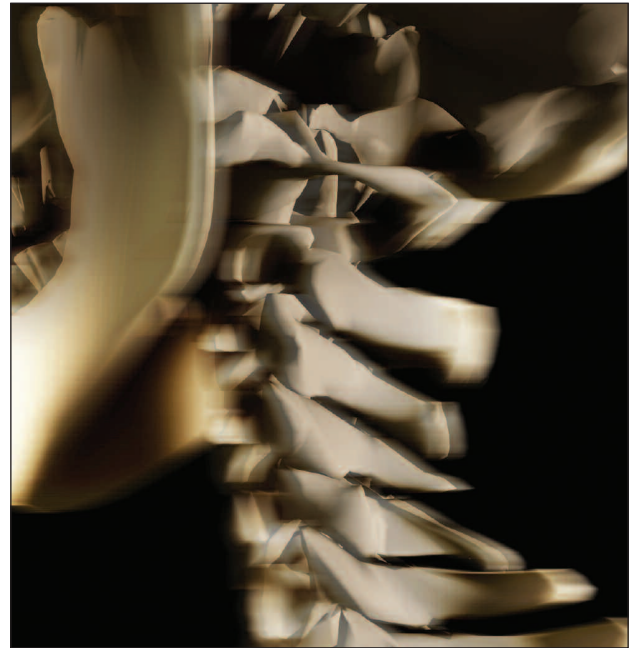
Workplace Whole-Body Vibration and Noise Assessments

The Client

Coca-Cola Enterprises Ltd employs over 4,000 people in sites, depots and offices all over the UK. The company is responsible for manufacturing and distributing a wide range of different drinks products to customers throughout England, Scotland and Wales. The Regional Service Centre in Northampton is the largest stand-alone warehouse in the Coca-Cola GB network. It occupies 250,000 ft², holds over 300 different products and has the capacity to store 24,500 pallets.

The Problem

The company wanted to check its compliance with the requirements of the Control of Vibration at Work Regulations (2005) and the Control of Noise at Work Regulations (2005) with regard to forklift truck drivers, break bulk pickers and workshop engineers working at the Regional Service Centre. The regulations are designed to prevent the health risks associated with occupational exposure to whole-body vibration and noise in the workplace, i.e. back pain and hearing loss respectively.



What we did

HSL worked in partnership with Coca-Cola Enterprises Ltd to provide robust data in the form of estimated exposure values for whole-body vibration and noise. Noise levels and whole-body vibration magnitudes were measured on-site under typical working conditions using a range of portable equipment, including dosimeters, a sound level meter with frequency analysis, and a hand-held vibration meter. Additional measurements were also made to establish environmental noise levels at the site boundary. The data obtained was used with information on typical shift and break patterns provided by the company. The exposure estimates were compared with exposure action and limit values defined in the Regulations to determine what specific duties applied to Coca-Cola Enterprises Ltd with respect to the control of whole-body vibration and noise. HSL's web based mapping capability has led to:

Outcome/Benefits

Following the HSL assessment, the company issued new hearing protection (using a type that did not overprotect users) and also replaced existing forklift seats with new suspension seats. Several months later, the company requested additional measurements to investigate how effective these new seats had been in reducing the forklift truck drivers' whole-body vibration exposures. The HSL results showed that the new seats had contributed to a reduction in whole-body vibration exposure, and that effective training was needed to enable drivers to adjust the new seats correctly. Coca-Cola Enterprises Ltd were very pleased with the work.