

# Science, engineering and technology

The HSC Science Strategy 2005–2008 ([www.hse.gov.uk/research/content/strategy0508.pdf](http://www.hse.gov.uk/research/content/strategy0508.pdf)) sets out how we will apply high-quality science to support delivery of our vision, mission and PSA and to look ahead, identify and meet future challenges. We have identified improving understanding of organisational/human behaviour and how to influence this as a key research area. One example of this is our work on the *Trojan Horse Health and Safety Messaging Project*.

*Trojan Horse* is an example of successful partnership working between HSE and industry to improve safety on construction sites. The Steel Construction Institute led the project, with Loughborough University and a number of trade associations working as partners under the Co-Construct umbrella. Several construction companies provided significant technical and logistical support.



Time can reduce the impact of the safety information routinely displayed at construction sites. This project aimed to remind site operatives of key safety messages (eg to lift loads correctly) just before they embark on that activity. The messages were carefully designed in collaboration with relevant trade associations, and displayed on building materials and tools so that they would be visible at point of use. These safety signs rely mainly on pictures, with little or no text – so are suitable for a growing non-

English-speaking workforce.

The first phase of the study showed that the *Trojan Horse* messaging technique:

- generated minimal interference with construction site works;
- elicited positive responses from operatives working on site and using materials on which the *Trojan Horse* safety messages were displayed; and
- resulted in high levels of awareness and recall of content of the safety recommendations, despite significant ‘background noise’ from other site safety notices.

The second phase of the study, which aimed to assess the long-term and behavioural impact of the safety messages, showed that:

- awareness of the messages increased after repeated exposure;
- observations of behaviour after implementation of the *Trojan Horse* message suggested a positive impact on workers’ behaviour; and
- the social environment played a central role in shaping the behaviour observed in this study.

The positive outcomes of the study have led HSE to recommend the use of *Trojan Horse* messaging as part of companies’ overall health and safety strategies. These outcomes were presented at a high-profile seminar in September 2006, attended by key health and safety personnel from major contractors, construction clients and trade associations.