HSE

Health and Safety Executive

Case Study

Safety culture at a large distribution centre



United Biscuits (Logistics)

United Biscuits (UB) is a large manufacturing organisation with a major distribution centre. HSL worked in partnership with UBs Logistics division, consisting of approximately 350 employees based in a warehouse and transport setting. The majority of activities on site involve work place transport (WPT), involving use of picking trucks, fork lift trucks, reach trucks, counterbalances, pump trucks, and a large volume of trailer movements, shunting and driving both on and off site, as well as delivering to over 800 sites across the UK and to over 130 countries world wide.



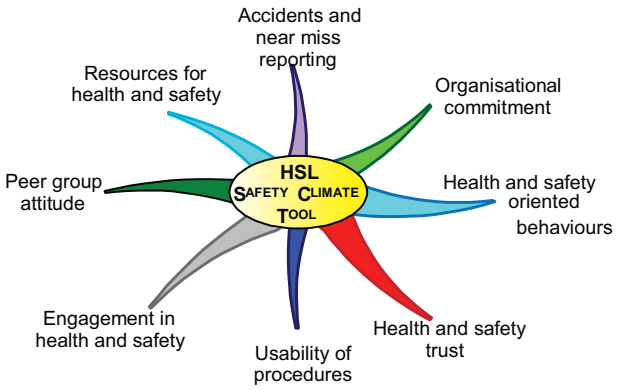
UB (logistics) had recently finished a large behavioural safety campaign and were interested in exploring how safety climate had changed on site.

What is safety culture/climate?

HSC (1993) defined 'safety culture' as "the product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine commitment to, and the style and proficiency of, an organisation's health and safety management"[1].

Traditionally 'safety climate' was used to describe a snapshot of the safety culture at a particular time point. However the terms 'culture' and 'climate' are now used interchangeably.

Organisations with a positive safety culture are characterised by "communications founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures."[1] This has led to increasing recognition of the importance of considering safety culture in successful management of safety performance.



The HSL Safety Climate Tool (SCT) is an attitude survey questionnaire. It consists of 40 statements relating to 8 key topics (factors) that together assess employees' perceptions of safety on site.

What we did

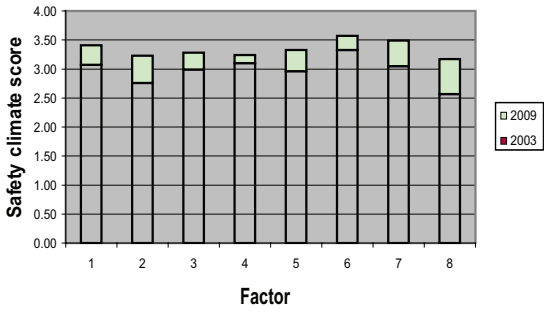
HSL analysed UB (logistics) accident data collected between 2003 and 2009, and compared this with the results of safety climate surveys carried out at the same times.

[1] HSC (1993) ACSNI study group on human factors. Third report Organising for Safety. HSE Books.

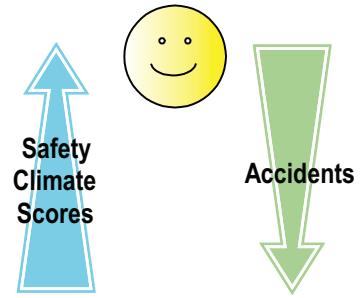
What we found

Results showed a significant increase in SCT scores between 2003 and 2007, and more consistent SCT scores between 2007 and 2009.
Overall this indicates a more positive safety climate in 2009 than 2003.

Difference in safety climate scores between 2003 and 2009, by factor

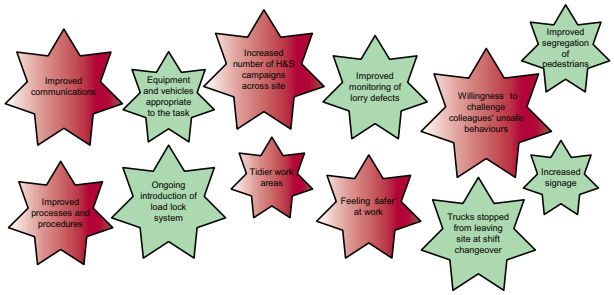


In addition, detailed discussions with groups of employees revealed other changes across the time period.
Significant work place transport improvements and changes on site (high-lighted in green) were reflected in safety climate scores and accidents.



Change between 2003 and 2009

Over the same time period, accidents showed a steady decline with the average accidents per month reducing from over 7.7 (2003) to approximately 3.2 (2009).



Key points

- UB (logistics) has engaged with the workforce at a number of time points (initially through discussions with workers regarding safety on site) and then through involvement in safety climate surveys, and focus groups to discuss the survey findings and identify underlying reasons for survey responses. UB (logistics) also use a Safety Watch Observation Process (SWOP) as a framework for observing workers, and discussing their observations, and have involved workers in an extensive behavioural safety campaign, consisting of a series of training sessions and facilitated discussion groups about the site;
- A variety of physical and procedural changes have occurred on site;
- Reduction in the number of accidents on site.

John Johnstone, HS&E Manager for UB (logistics) "The HSL SCT was used to map changes in UB (logistics) safety climate over time (2003-2009). This provided both the evidence to prioritise operational areas where improvements and development were required, and a measure for monitoring progress.

Looking back over the same time period there have been a number of changes on site (e.g. physical improvements such as better pedestrian and vehicle segregation and signage). We've moved forward in how we look at safety and this has been reflected in the change in SCT results. We have moved from 'prescriptive' safety management to behavioural safety management within UB (logistics). For example one recent campaign involved all staff receiving training as part of a site wide behavioural safety campaign. We also worked with HSL researchers who conducted a series of independent focus groups, engaging staff in discussions about the SCT results.

We recognise that safety is a way of life and that a holistic approach (including worker engagement) is essential to employee safety. At work, on the road or at home we recognise that there is a strong link between quality, environment and safety. This ensures we deliver to a standard, the quality of which is expected by our customers world wide".