Behavioural Safety: A Case Study from ICI Autocolors, Stowmarket

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Introduction

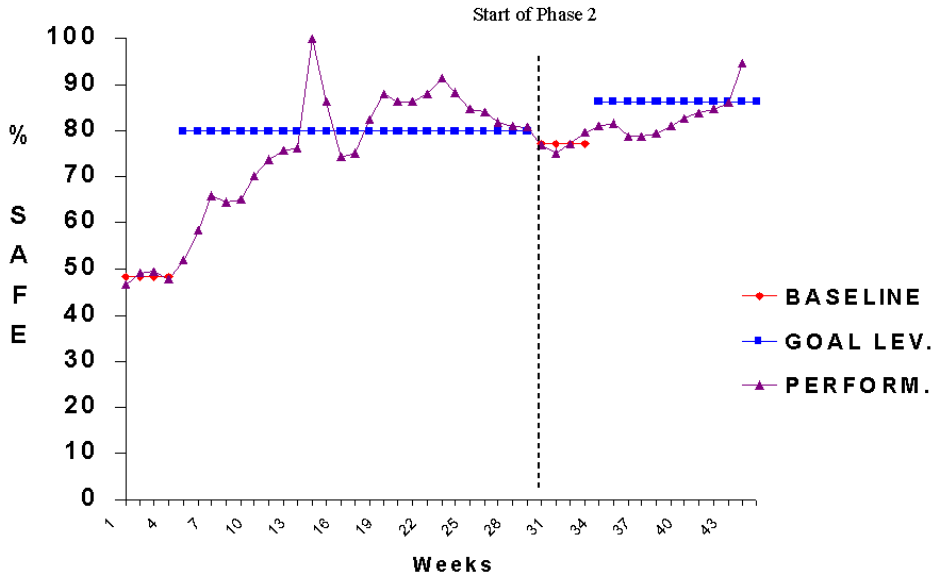
Around 6 people die and around 80 people suffer a lost-time injury at work as a result of unsafe behaviour everyday in the UK. This cost UK businesses billions of pounds each year, while the pain, suffering and burdens placed on families are immense. All efforts to reduce accidents and improve safe performance in the workplace are concerned with human behaviour. "Behaviour and attitudes is what it's all about," is a commonly heard phrase. Because of their dramatic successes in reducing accidents, safety professionals and line managers are increasingly adopting workforce-driven behavioural safety programmes. Other business benefits often include improved co-operation, involvement and communications between management and the workforce, enhanced team working, and reductions in workplace stressors[1].

After examining several different approaches to behaviour-based safety, ICI Autocolors in Stowmarket adopted 'The B-Safe Programme®[2]'. Beginning in May 1998 a series of briefing sessions were conducted with all site personnel (approx. 400) to inform them about the underlying theory and processes involved in order to seek their 'buy in'. Sceptical views about management's commitment were expressed, particularly as the project would be owned and driven by the employees themselves. Comments heard from all corners included '*they always put production before safety*' and '*they won't spend the money to put things right'*. After much consultation with the shop stewards and safety reps, the management team convinced people that they were serious about the initiative. A number of people ranging from operations managers to safety representatives then undertook a five-day training course run by B-Safe consultants from BSMS. John Seaborn (Resins and SHE manager) and Alan Page (shift manager) were appointed as B-Safe champions and Samantha Rae (shop steward & safety rep) an operator from the Hardeners department was appointed as the full-time B-Safe co-ordinator.

The next step was to develop separate behavioural observation measures for each of 31 work areas, by examining the accident records for the previous two years to identify that small proportion of unsafe behaviours implicated in the lion's share of accidents[3]. Once developed and agreed upon by personnel from each workarea, 49 volunteer observers attended a one-day training course to learn observation techniques and the duties required of them. They then monitored their workgroups safety behaviour for 10-15 minutes every day for four weeks to establish a baseline so that each workgroup knew how safely they were behaving prior to actually trying to improve. On the basis of their baseline score, each workgroup set themselves a safety behaviour improvement target at 30-minute meetings.

The average site baseline for all 31 workareas was 48% safe (see figure 1), meaning that people were at-risk from their unsafe behaviour 52% of the time they were at work. The average safety behaviour improvement target for all 31 workareas was 80 percent: a site improvement target of some 32 percent. This target was achieved in week 13 and pretty much maintained until the end of phase 1 at week 29. By week 30 new behaviour observation measures had been developed and a further 38 observers had been trained to implement phase two. The average baseline score for phase two was 77% safe, a 30 percent reduction in at-risk behaviours, compared to phase 1. The higher the percentage safe baseline score, the harder it is to improve, so although the individual workarea improvement targets ranged from 73% to 97% the average site target for phase two is 86%. Again this was achieved some 13 weeks after kicking off phase 2, in week 43.

Figure 1: Percentage of safe behaviours



Other positive findings from the project include the identification of numerous unsafe conditions by the observers. The employees in some workareas have provided their own solutions to some of these problems. For example, in the Thinners department, employees designed a pump to help with the safe loading of solvents from drums into mixers. Sam Rae monitors the status of such remedial actions and in conjunction with other employees on site, has helped to achieve a 71 percent completion rate for remedial actions. Moreover, since B-Safe went live in Sept 1998 the site's accident rate has reduced by approximately 40 percent. Overall, the results of this case study show that the B-Safe initiative is helping ICI Autocolors to achieve a true safety partnership between management and employees.

References

1] Cooper, M.D. (1999). Mitigating the adverse impact of some workplace stressors with behavioural safety. *Industrial Safety Management Magazine*, Sept.

2] Cooper, M.D. (1996) 'The B-Safe Programme®. Applied Behavioural Sciences, Hull.

3] Cooper, M.D. (1998) *Improving Safety Culture: A practical guide*. John Wiley & Sons, Chichester.