

## Does Behaviour-Based Safety Actually Work?

With so many approaches to safety improvement, and so many well marketed approaches, it is difficult to ascertain which approach is actually best.

Guastello (1993) conducted a comprehensive review to address this issue. He systematically evaluated 53 different research reports using 10 different approaches. The Behaviour-Based Safety (BBS) approach was reported to be most effective with an average 60% accident reduction. Next effective was an ergonomic approach with an average 52% reduction, and third effective was engineering with an average 29% reduction. Other approaches ranged from 20% accident reduction to 0% accident reduction. These included group problem solving, Government action, management audits, stress management, poster campaign, personnel selection, and near-miss reporting.

Several reviews of BBS approaches have been conducted. Tuncel, Lotlikar, Salem et al. (2006) conducted a meta-analysis of 13 studies and concluded that a statistically significant reduction in accidents was observed. Sulzer-Azaroff and Austin (2000) identified 33 BBS studies in their review. While reporting methods differed, 32 studies reported reductions in injuries with 29 of those reporting substantial reductions. Krause, Seymour and Sloat (1999) identified 73 companies who had implemented a BBS approach for at least 5 years. They found the average reduction was 26% from baseline in the first year increasing to 69% by the fifth year.

Behaviour-Based Safety can be effective. However, like any process it needs to be implemented and supported by both management and workers alike.

### References

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