

Behavioural Safety

A briefing for workplace representatives

Health and Safety

May 2010



Behavioural Safety

Behavioural safety is the name given to a number of types of programmes that aim to improve safety by changing the behaviour of workers. It is also called "behavioural modification" or "behaviour based safety".

It was been around since the 1930's and is most common in the UK in production industries, in particular the chemicals and energy sectors, but aspects of it are used elsewhere.

This briefing is intended to help union representatives respond to any behavioural safety initiatives within their industry or workplace.

What is Behavioural Safety?

Behavioural safety programs vary considerably. Some have the behavioural element as just one component of a wider safety management framework, others see changing behaviour as the prime focus. Most initiatives that are called "behavioural safety" in the UK are not really behavioural safety programs at all but simply contain an element of attempting to change workers behaviour through training and other interventions as part of a risk reduction programme.

What is central to all behavioural safety systems is the belief that injuries and illnesses are a result of "unsafe acts" by workers and to prevent these unsafe acts management should target specific behaviours and aim to change these based on observing and monitoring workers.

Many behavioural safety programmes also are linked to punishing "bad" behaviour, such as if a worker has an injury or rewarding "good behaviour" such as an "accident free" period.

All full behavioural safety programs follow a similar process. They begin with site observation including individual feedback. The observer monitors the worker and notices both safe and unsafe behaviours. At the end of the observation, the observer will fill in a checklist with the safe and at-risk behaviors they noticed along with the date, time and location of the observations. The observer commends any safe behaviour by the worker and explains, one by one, the unsafe behaviours the worker was doing. They both discuss the unsafe behaviours until the worker agrees to try the suggested recommendation made by the observer. The worker's comments and reasons for the at-risk behaviour is recorded along with the suggested safe behavior. Reports are collated for a steering committee to analyse and recommend practical solutions. These reports flag-up trends of at-risk behaviors and in which location they are taking place. The steering committee, which often includes union or management-appointed worker representatives, discusses and analyse report findings. The committee then produces a set of recommendations to tackle workers' behaviour which go to senior management for approval and implementation.

Many behavioural safety programmes are developed by management consultancies who sell their system to employers, however most behavioural safety systems are quite expensive to operate and almost all of them require considerable input by managers. The two biggest, or at least best known, are the Dupont "Safety Training Observation Program" (STOP) and BST's "Leading with



Safety" approach. Both were developed in the United States and follow the ideas of an insurance executive called Herbert Heinrich who reviewed thousands of accident reports completed by line managers. Of the reports Heinrich reviewed, 73% classified the accidents as "man-failures;" Heinrich himself reclassified another 15% into that category, arriving at the claim that 88% of all accidents, injuries and illnesses are caused by worker errors. Heinrich's data does not tell why the person did what they did to cause the injury and did not question the line managers' claim, unless it was to reclassify it upward. Since then other behavioural safety companies have made even higher claims. The website of BehaviouralSafety.com states "96% of all workplace accidents are triggered by unsafe behaviour". Dupont, who developed a behavioural safety scheme called STOP also say that 96% of injuries are caused by unsafe acts and that 4% by unsafe conditions.

That however is disputed by almost all other health and safety practitioners who say that the main cause of injuries is failings in the management of health and safety, and that you cannot simply classify an injury as being caused by one single cause, as normally it will be caused by multiple factors that result from a failure to implement a safe system of working. According to the HSE, 70% of workplace deaths and injuries are caused by management failures.

The opposing views on what causes an injury are partly explained simply by different ways of looking it. If a worker in an abattoir slips on an unclean floor the employer may say it is because the person was not looking where they were going despite having been warned about the danger of slipping. A safety professional may claim that it was because the worker did not have the right shoes to protect against slipping. A safety representative would argue the slip happened because the floor was unclean.

Problems with behavioural safety

Behavioural safety is founded on a wrong premise, which is that it is workers cause injuries, rather than management failures. In fact, before an "unsafe behaviour" can cause an injury there has to be a hazard. All injuries and illnesses are a result of exposure to a hazard, so if you remove the hazard, you eliminate the risk of exposure.

Because behavioural safety is based on observation it often misses what actually happens in the workplace. People act differently when they are being observed than when they are not. Often, when a worker is left by themselves, they may remove protective equipment, or not follow the procedures they are meant to. A system based on risk reduction would ensure that the hazard was removed or minimised. It is better to develop a system that is "idiot-proof" rather than have a health and safety system that is based on a worker doing what they have been told and trained to do.

As behavioural safety focuses on the end point of a chain of events that lead to a worker doing something, it does not address the question of who makes the decisions about work speeds, productivity levels, shift patterns and how they relate to safety. For unions, the decisions made at board-room level can have much more effect on injury rates than what individual workers do.



the Texas City explosion, which killed 15 people, their first response was to blame "human error". Subsequent investigations have indicated that the disaster was a result of management failings and there is a perception that BP's focus of the behaviour of their workforce meant that they took their eye of the process safety ball. A report a year before the explosion reported that, on one BP site, "when asked about the incident investigation process, many (interviewees) view it to be more punitive in nature, a process that does not look to the root cause of an incident."

Most genuine behavioural safety programmes are introduced by management consultants who sell it to a company that is often not really sure what it wants or what is involved. These "off the shelf" packages are unlikely to be what the employer is actually looking for and will not address issues such as management behaviour.

While behavioural safety programmes can reduce injury rates this is often a result of the considerable management or consultant effort, and if the same effort were put into removing risks then it is likely that much greater benefits could be achieved. Also, in the US, there is evidence that some of the reductions in injuries are a result of reduced reporting.

Most behavioural safety systems concentrate much more on safety and either ignore, or fail to fully recognise, the health effects of work. They are also time consuming, expensive and difficult to maintain.

The Law

The law in Britain is very clear. It is laid down within the Management of Health and Safety at Work Regulations. Hazards must be identified through a risk assessment and any risk removed or reduced "as far as is reasonably practical". In reducing risk an employer has to go through what is called a "Hierarchy of control", which is a ranking of which part of the process they have to do first.

This is called the "General Principles of Prevention" and come from a European Directive called the "Framework Directive". It states that you must begin by avoiding risks. For those that cannot be avoided you should evaluate them and combat them at source – that means reducing them and introducing safe systems of work. It also says that "collective protective measures (have) priority over individual protective measures."

This is usually shown as a "hierarchy of control" measures that employers should follow. This is:

- Elimination
- Substitution
- Isolation
- Reduction
- Safe Systems of Work
- Good Housekeeping
- Information, Instruction, Training & Supervision
- Provision of Personal Protective Equipment

Behavioural safety focuses on fixing the unsafe actions of workers which are a result of the system they work in, not the other way around, and by concentrating

Behavioural Safety

Health and safety May 2010

4



on the workers actions, behavioural safety turns the hierarchy of controls on its head as behaviour modification programs favour PPE and training as the main ways of preventing injury. Because of this, many pure behavioural system programmes do not conform to UK or European law.

Links with injury recording

Because behavioural safety claims that it is the actions of workers that cause injuries then when a worker is injured they are usually seen to be at blame. Although many companies say that they do not link injury reports with disciplinary action, a lot of schemes do ensure that those who have an injury are advised on "corrective action" and if they have more than one, the worker is labelled an "unsafe worker".

In the US "Accident Repeaters Programs" are common which identify those that have more than one injury and offer counselling, but give a warning after a further injury and disciplinary action if there are any more. This leads to workers failing to report injuries or near misses, especially those that do not require time off.

Behavioural safety programmes are also often linked to reward programmes. These reward either individual workers, or groups of workers, for not having an injury or for achieving lower injury and illness rates. Again these can lead to under-reporting of injuries. Where prizes or bonuses are offered to a group of workers, such as a single department, it can lead to resentment by work colleagues against an employee who is injured, as they may be blamed for the others losing their bonus, even though the employer is to blame.

Trade union view

Trade unions are there to ensure that workers are protected. Because union health and safety representatives are based in the workplace they know about how work is done and how injuries happen, which is unsafe workplaces caused by inadequate risk assessments, bad systems of controlling hazards, poor training, too many demands, and corners being cut.

It is not worker behaviour that should be the focus of action to improve safety but management behaviour, because management are in control of work and the workplace. It is them who make the decisions about workplace health and safety, not the workers, and it is management, directors and owners who ultimately should be held responsible for any breaches.

The way to prevent injuries and illnesses is to remove the risks caused by hazards in the workplace. That means doing a risk assessment and, where there is a risk, acting on it. You prevent someone who is operating a guillotine from cutting off their hand by ensuring the machine is properly guarded and the blade cannot operate if there is any obstruction, not by teaching the operator to keep their hands out of the way. The same is true of health issues. Work-induced hearing loss is best preventing by reducing the noise rather than either giving workers ear protectors or advising them to stay away from noisy areas.

Should we ignore trying to change behaviour? Absolutely not. Reinforcing safe ways of working can be an important vehicle for



reducing injury and illness and how people act helps determine a safety culture. Training and information for workers are a key part of any attempt to manage of health and safety and is strongly supported by trade unions.

However it is not a substitute for removing or controlling the risk. That must be the priority and hazards control must be based on risk assessment. Once methods of controlling hazards are in place it is important that they are explained to workers who are also taught how to use equipment safely, including and personal protective equipment if necessary.

A report on behavioural change in the UK oil and gas industry concluded "Behavioural modification is not an alternative to a vigorously applied conventional safety management system. Sound engineering and systems should be in place before attempting to use behavioural modification programmes to further improve performance."

Many initiatives that are introduced by management that are called "behavioural safety" are in fact no such thing. They are simply attempts to reinforce a safety culture. This can be confusing to safety representatives, who may find that what management are proposing under the heading of "behavioural safety" is simple training and consultation, which they welcome.

How do we change behaviour?

- Strong health and safety culture
- Lead from the top
- No-blame culture
- Workers given information
- All workers trained in both the need for safety and the application of the organisations policies
- Workers consulted through their unions on all important issues.

An HSE briefing on safety culture" states "Many companies talk about 'safety culture' when referring to the inclination of their employees to comply with rules or act safely. However, we often find that the culture and style of management is even more significant, for example a natural, unconscious bias for production over safety, or a tendency to focus on the short term, or being highly reactive"

Checklist for unions

- Whatever system your employer is using they must still seek to remove or reduce risk as far as is reasonably practical through risk assessment. Any other safety programmes are secondary to that.
- If your employer is using a behavioural safety programme you should get advice from your union.
- Your rights to a safety committee are not removed just because the employer has a behavioural safety programme, even if safety representatives are involved in the steering committee. Make sure you have one and that regular reports come to it.
- Make sure that all injuries, illnesses and near misses are reported and recorded.
- Speak to safety representatives in other companies in your industry or



7

- sector and find out what safety management systems they use. Compare experiences.
- Support genuine attempts to change the safety culture through union involvement and training.

Resources

Because most material on behavioural safety is written by the companies that develop the programmes there is very little available, especially in the UK. Hazards Magazine has produced useful links on the issue, including articles it has produced. They can all be accessed at: http://www.hazards.org/bs/

The HSE a checklist for employers which, although not dismissive of behavioural safety, does highlight some of the problems: http://www.hse.gov.uk/humanfactors/topics/behaviouralintor.htm There briefing on safety culture is at: http://www.hse.gov.uk/humanfactors/topics/07culture.pdf

For an academic view go to:

http://www.efcog.org/wg/ism_pmi/docs/Safety_Culture/Hopkins_what_are_we_to_make_of_safe_behavior_programs.pdf

The unions at Dupont produced their own criticism of the company's scheme: http://www.bhopal.net/Walking the Talk.pdf