



Working Safely

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1.0 Introduction

1.1 Aim of this brochure

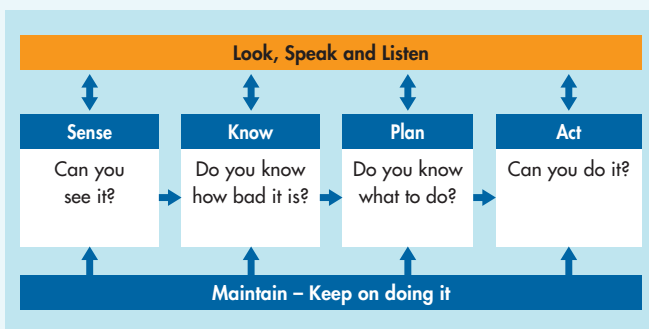
In a hazardous world, one of the best ways to ensure safety is to act in a sensible way when around hazards. The Company has to provide a safe place to work; that is why an HSE-Management System is required. However, not all hazards can be removed or controlled by systems. People working close to hazards must be on their guard, for themselves and for their workmates. This means that they have to take care and act safely at all times.

The exercises in this brochure help to prevent people from ignoring hazards they might meet at work and make it easier to change their behaviour. Members of the workforce and their front line supervisors must act in ways appropriate to the risks they face. By looking after themselves, and looking out for their workmates, they can reduce errors and avoid taking dangerous shortcuts to get the job done. This has to be supported by management, who are responsible for creating the conditions in which safe behaviour is possible.

In order for someone to work safely the main steps are necessary:

- **Sense** the hazard – can you even see/hear it?
- **Know** the hazard – do you understand how dangerous it is?
- **Plan** your response – what are you going to do about it?
- **Act** in the best way – will you actually do the right thing?

In addition, you also need to **Maintain** this way of working and be prepared to give and receive feedback to make working safely a habit – **Look, Speak and Listen**. This is shown in the safe behaviour model below.



You may already use tools that support one or more of the steps in the safe behaviour model. Section 2 of this brochure will help you understand how to improve existing tools using the exercises in this brochure. Once you have identified which steps of safe behaviour need addressing, you can use exercises from this brochure, which are specific to the steps in the model.

This brochure provides a structure for understanding some of the causes of unsafe behaviour and addressing them:

- It explains how and why people fail to act properly around hazards
- It contains tools that can be run either in formal workshops, or preferably more informally as part of day-to-day activities in meetings, or toolbox talks.
- It helps change the attitudes of people who actively take part in the exercises.
- It gives guidelines for managers on how to set clear expectations and improve their safety reporting system.

1.2 Sense

If people cannot even recognise a hazard, then they will not do anything about it. The picture to the right shows a typical situation that ‘looks’ quite different once one knows that this was a workforce in 1989 recruited locally, inserting explosives into the ground after a short training period. Many hazards are like this and the inexperienced, such as short-term contractors, may not even know what they are looking at. It is not just vision, many of our hazards can be perceived with other senses. Hearing is equally vital, if we want to avoid being run over by a vehicle coming from behind. The sense of smell tells us that there are dangerous gasses in the atmosphere. Feeling unusual vibrations may provide useful warnings if we realise what we are sensing.



It is only once someone can recognise a hazard that they can manage it. Often this essential step is not given sufficient consideration, and people’s ability to work safely is immediately compromised. Therefore it is a good idea to check that everyone exposed to a hazard can actually recognise it for what it is. There may also be hazards and at-risk situations that cannot be immediately sensed. These invisible hazards could be a tired or stressed crew member, an inexperienced contractor, or a supervisor in a hurry. Other hazards which are hard to spot are contractual pressure, noxious gas or someone taking a short cut.

1.3 Know

Even if you can sense a hazard, this doesn’t mean you always know how dangerous it can be. It is vital to understand hazards in the workplace – the crucial step of not just looking at, but actually *recognising* a potential



danger. People can become complacent about the hazards they experience or just become blind to them. Success at not being hurt comforts people into a false sense of security to hazards they can recognise, but feel they can personally control. This does not provide the level of attention we need when we want no accidents at all. To avoid being hurt we need to understand *all* the important hazards.

Knowing about our hazards make us respect them; thinking seriously about the potential consequences and how they could affect us makes us more likely to want to behave differently around that hazard.

Few people know that more people are killed or injured holidaying on tropical islands by falling coconuts than by the sum total of their holiday air and road travel. Once you know this you will never look at a palm tree in the same way again. This is because spending time thinking about hazards and how they can affect you personally takes up “brain space” and adjusts how you approach the hazard in future

1.4 Plan

Knowing that what you are looking at is dangerous is a start, but not enough. The question is: what do you do about it? The obvious solution is to be careful, but taking care is a skill we have to learn – simply ‘being careful’ is not good enough. People need to be competent to know how to deal with the hazard and ask questions like:



• Can we avoid the hazard altogether?

• Can we protect ourselves by containing the problem?

• Should we tell others or can we remove the problem?

• Can we warn others before they are at risk?

Our personal skills give us a mental toolbox of possible solutions; we need to make sure we consistently choose the safest response to the hazards we recognise. When working with electrically live equipment it is possible to survive by being extremely careful, but switching the equipment off and isolating the area where we want to work is the only sensible choice.

1.5 Act

Once you have chosen the most effective action the question is: Will you do it? The first step is to create situations where it is easy to perform a behaviour and hard to avoid. People put their contact lens equipment next to their toothbrushes as a reminder

to take them out before bed; cars can be made impossible to start if already in gear; checklists spoken out loud make it easier for everyone to remember; interventions that use a special form of words prime people for the conversation.

It is vital to understand what gets in the way of our good intentions; these may be organisational factors or purely individual issues. Open discussion about blockers (both from supervisors to their workforce and from workers to their managers) is essential for improvement.

1.6 Maintain

One of the toughest behavioural challenges is helping people turn safe behaviour from a one-off act into a habit. We form habits all the time, such as where we put things after we have used them so we can find them again. It is, however, hard to keep up new behaviours when they are replacing old habits. Every time you drive a different make of car, you may find yourself using the windscreen wipers when you want to flash the lights. Picking up a habit is natural and easy, if nothing gets in the way, so setting up a programme to maintain good habits means making them easy to acquire and removing old habits.

1.7 Look, Speak and Listen

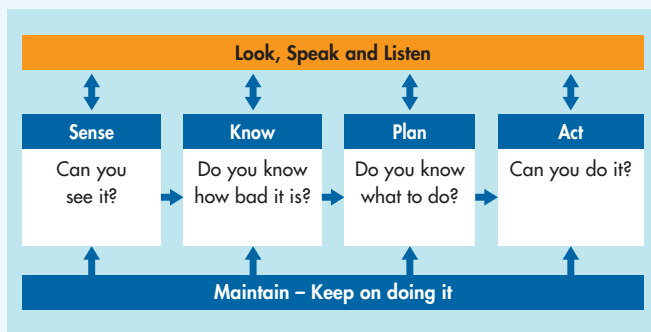
No one manages to work safely all the time. Even if people have the best intentions they can still commit unsafe acts, because we are all prone to errors. Sometimes we only realize what we have done once it is too late, unless it is pointed out to us whilst we are doing it. We need to look out for our colleagues and have the skills and courage to intervene with them when we see an unsafe act. Both giving and receiving feedback are skills that can be developed, particularly as we

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2.0 Applying the model in practice

The Safe Behaviour model has six main steps, which progressively build on each other. You need to sense a hazard before you can know the risks and need to appreciate those risks before you can plan what to do, and you must decide what to do before you can act. Then each step requires maintenance, with the whole process supported by observation and feedback. Understanding how the model flows can help you identify areas for improvement.



2.1 Analysis Using Safe Behaviour Model

The Safe Behaviour Model is a useful framework to better understand patterns of incidents or near miss reports. Normally, when someone is reviewing the details of a site's recent incidents, it can be difficult to identify a pattern, unless there is an obvious common theme such as lifting, or back injuries. Even then, incorrect conclusions can be drawn. However, when a number of incidents are analysed in terms of where, on the Safe Behaviour Model, things started going wrong, incidents that appear unconnected can turn out to have a common cause.

INJURY	SHORT DESCRIPTION OF INCIDENTS	CLASSIFIC.
MTC	While removing a steel ring (which is attached to a sling package) from the truck hook, the steel rig slipped and struck the employee beside his right eye.	Sense
MTC	A truck driver's helper put his PPE into his truck after a long day on the rig move. He put his foot on the first rung of the steps of the truck (2 steps). He thought it was the last step and he let go of the handle. The helper felt back and was injured.	Sense
LTI	Two technicians were replacing damaged light bulbs on the terminal lighting system at height using a safety harness and assisted by a crane. One was changing the light and the other was directing crane motion on the ground. A bee's nest was disturbed and while replacing one of the bulbs the bees attacked the technicians.	Know/Look, Speak, Listen
MTC	A mechanic was removing a flange using a punch and a hammer in order to repair the spring underneath the tank BT 02. While handling the hammer with the right hand and the punch with the left hand, the hammer hit his thumb resulting in a cut.	Plan
LTI	An employee was bitten by a snake in his ankle whilst de-bushing.	Sense
MTC	While making omelet for breakfast, the injured party tossed the omelette and in doing so some hot oil landed on his gloved wrist. The fact he was wearing latex gloves made the injury worse as the glove melted.	Know
LTI	A Security officer who was on guard duty, cut his finger while lowering a barrier.	Know
LTI	Whilst cutting bush in the field the injured party moved a branch which had been trapped by a fallen tree. The branch whipped back and hit him on his right leg. The injury required evacuation to hospital.	Sense

Once you know where your problems are, you can use simple exercises to address them!

On first inspection the 8 incidents previously described appear unrelated, e.g. snakebites, bee stings, slips, trips and falls. However when mapped onto the Safe Behaviour Model, a pattern becomes apparent. Half of the incidents were caused by those involved not *sensing* the hazards. For 3 of the incidents, the hazards were identified but the people involved did not *know* how hazardous it was; their mental risk assessment was inaccurate. This shows that for this site the *Sense* and *Know* exercises in the centerfold are the most appropriate for preventing incidents. Research has shown that up to 90% of incidents happen because of a failure at the Sense or Know steps of the model.

Sense – and stay tuned

The Sense exercise (3.3) helps people to recognise the hazards they face. This can be done as a classroom based exercise in a safety meeting, as part of a toolbox talk, or done as part of a team site walkabout.

An example of how to do this is to divide a work crew into teams and set up a competition. Each team can be given a digital camera to take photos of their worksite to use in a hazard spotting competition during safety meetings, with a prize for the most/best hazards spotted. Often this leads to people thinking outside the box in terms of what could be hazardous to them, e.g. a supervisor under pressure from his boss, someone's competence etc. If it is not possible for participants to take their own photos then the facilitator should use local photos of a site the participants are familiar with.

An alternative version of this exercise is for the team to walk around their site taking time to observe where hazards could potentially be present and physically point out all the possible hazards, again with prizes for the teams who spot the most/best hazards.

Know – and stay afraid

The Know exercises (3.4 & 3.5) raise awareness of hazards by making them more obvious. A list of hazards can be obtained by looking at a Hazard Register, but the Sense and Know exercises can also serve to check whether the Register itself is up to date. Risk assessments may need correction. Are there hazards that have been missed? Have circumstances changed? The **Risk Assessment Matrix** "bringing it to life" tool supports this process.

Knowing requires sensing, but the real perception of a hazard needs more than just that. You must know how the hazard can affect you and you must learn to remain wary even when incidents have not happened.

One way of helping people to really understand how dangerous something is, is for them to discuss the outcomes of encountering various hazards. This is best done in a small group discussion on who could be harmed by a hazard and how? This changes the way people view the hazard. Group discussions like this are particularly effective if the consequences of the hazard can be made personal.

This group discussion works because we all have an internal risk thermostat that influences our behaviour. Spending time reflecting on the personal implications of a hazard adjusts our risk thermostat in relation to that hazard, so we become more wary and act in a safer way. What is important is personal reflection and discussion. Showing photos of injured people and the consequences of accidents is counterproductive and reinforces a mind set of ‘that could not happen to me’.

What do I Do with Existing Tools?

Many existing safety improvement programmes help people behave more safely, but they usually only cover parts of the Safe Behaviour model (sense, know, plan, act) and are often designed to work in environments different from ours.

As the processes described in this brochure are generic, they fill the gaps left by programmes focused on specific parts of unsafe behaviour, while building on the experience and commitment already present in the workforce. Existing programmes may:

- Concentrate on changing the environment even if people are not aware of why and how they act.
- Be effective in making people behave safely, but require a lot of local tailoring.
- Reward safe actions without influencing the total context in which the actions take place.

It is important not to throw existing benefits away. The processes described in this brochure are designed to support improvements and extend existing safety programmes. Applying knowledge of how people behave safely to existing tools means that you should not add new work, just become more effective with activities that already happen, e.g. using some of the centerfold exercises in safety meetings, toolbox talks or intervention/observation training.

Plan – and keep thinking

Successful planning requires competence. People need to have sufficient knowledge of the various options they have in dealing with a hazard. The Plan exercise (3.6) encourages people to think through what they *can* do. Procedures define safe working

practices, but may need to be checked and brought up to date. A team may benefit more from a different approach by their supervisor. The tools **Managing Rule-Breaking** and **Improving Supervision** offer support on these particular subjects.

For any action plan it is important to be specific. From the good ideas people can come up with pick the most popular one. Who is going to do what and when? What is the review date and do all participants understand their tasks? Do they have the necessary support (time, manpower, management approval, etc.) to actually do it?

Act – and keep up good habits

Actions, and their maintenance, need support. How can supervisors help people acquire good habits? Changing bad habits is much harder than creating new habits. Many Behaviour-Based Safety Management systems concentrate on this part of the total process. Praise people for making the effort; remind them of what they agreed to do; provide comfortable PPE; make changes that reduce exposure to hazards. These are all steps that supervisors can take to support creating good habits and breaking bad ones.

One way of keeping actions alive is by reporting on progress – what goes well and what difficulties are encountered. Representatives of different groups who are working on a common behaviour change should meet regularly to discuss progress, share experience, and find solutions for problems. Representatives can take the ideas and plans back to their teams and implement them. This way a cycle is created that keeps the first action alive and promotes further improvements.

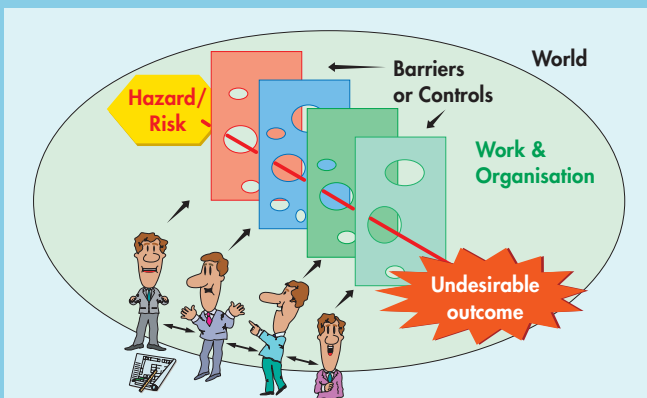
Look, Speak and Listen

Actions, and their maintenance, need support. No matter how good people are, we can still make mistakes at any stage of the Safe Behaviour model. That is why observation and speaking up when we see something that feels unsafe is so important. Unfortunately this is probably also the most difficult part of the process. People generally find it uncomfortable to tell someone they are doing something wrong and don't really appreciate it when someone else tells them; then good intentions often get lost in wrong approaches, pride and hurt feelings.

Because this subject is so difficult, extra attention is paid to it. Section 4 focuses on observation, how to do it well, and communication, how to give feedback and be a good receiver. Exercises 4.1 & 4.2 focus on improving skills on both subjects.

Working Safely

Incidents happen for all sorts of reasons. Many of the causes will have been around for a long time, but circumstances may suddenly make them particularly hazardous. Barriers placed between the hazards and the undesirable outcomes can become less effective (See figure below). Sometimes it is possible to rely on 'hard' defences, but one of the most crucial barriers still involves people behaving in safe ways. Often the assumption is that hazardous conditions can be controlled as long as people do what they should do, and incidents arise only when this is not the case. Unfortunately people, often the victims themselves, do not always realise just how important their own behaviour is and feel they have good reasons for their actions.



People form one of the defences against the hazards of the workplace. They usually form the final barrier, vital if all the previous barriers, such as design and maintenance, have holes. To function effectively, however, they have to be able to recognise conditions dangerous to themselves or to others, and to warn other people who are in danger or are behaving in ways that may have serious outcomes.

People can fail to behave safely for a wide variety of reasons. They may totally fail to recognise a hazard; some road accidents are labelled 'looked but did not see'. But even if they can perceive hazards, they may still fail to understand their significance; hazards can be seriously underestimated, possibly because they have never led to injuries before in someone's personal experience. Knowing that one is faced with a real hazard can still cause problems if people don't know what to

do; simply walking round a hazardous situation may be safe enough for one person, but reacting to it by making it safe and telling a supervisor may help save many. Finally, people may have all sorts of problems with actually doing what they know all too well they should do, such as telling a workmate to behave safely even when they may feel that 'it is none of their business'; although the health and safety of one's colleagues is always everyone's business at work.

The processes defined in this brochure support each of the steps necessary for safe behaviour. They provide a structure to get the most out of existing tools, but can be used stand-alone. They train people to recognise hazards and hazardous situations; they give people a toolkit of possible actions for dealing with hazards; they provide ways to carry out the necessary actions and also support colleagues in working safely together.

What makes Working Safely different?

- The approach is based on analysing how to get safe behaviour, rather than concentrating on stopping unsafe behaviour. It gives an overall structure to help understand what specific tools are doing.
- The psychological theory used to explain and change behaviour is well founded including Daniel Kahneman's Nobel Prize winning work on risk and decision making.
- Lessons from many other systems have been integrated into one unified process
 - Every system has its good points, these experiences must not be lost, but they usually focus on only one step, not the whole process.
 - Current activities should be incorporated into the process, there is no need to stop existing programmes.
- The different levels of HSE culture are taken into account
 - People can use the Working Safely program in ways that suit them, based on what they can realistically be expected to do at their level of HSE culture
- The approach is designed for your working environment
 - It involves people doing what they consider achievable and setting up situations so that they will actually achieve what they set out to do.

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