HealthScreen UK

Risk Assessment Guide

A collection of our articles on risk assessment for your workplace
The Difference Between Hazard and Risk

In order to undertake a risk assessment, it is important you understand the difference between hazard, and risk.

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Risk Management at Work

The terms Hazard and Risk are often used interchangeably but they are not the same thing. This is important in the context of risk management in the workplace. So we decide to take a quick look at the terms and what they mean in this context. When we refer to hazards in occupational safety and health the most commonly used definition is ‘A Hazard is a potential source of harm or adverse health effect on a person or persons’.

In the picture on the preceding page, there is a spill of water on the floor, that water presents a slipping hazard to persons passing through it. There
is a risk of slips and falls from the hazard of the water. If access to that area was prevented by a physical barrier then the hazard would remain though the risk would be minimised (a very simple risk management strategy).

**What is Risk?**

When we refer to risk in relation to occupational safety and health, what we are talking about is the likely risk that a person or persons could be harmed if exposed to a hazard. Risk management is not necessarily about taking the hazard away, in some cases that is impossible. However, it should be nearly always impossible to reduce the risk of the hazard causing damage.

**Categorising Risk**

We also need to categorise the risk in reference to the level of harm that any hazard could cause. We also need to think about the exposure of people to the hazard and the repetition of that exposure. For instance, exposure to airborne asbestos fibres is categorised as high risk, because a single exposure may cause potentially fatal lung disease. However, working in a general office undertaking administrative duties is a low risk activity based on limited exposure to hazards.

**Managing Risk With Control Measures**

Risks can be managed with control measures once hazards and the risk of exposure have been identified. Control measures include any actions that can be taken to reduce the potential of exposure to the hazard. They can also be any action that completely removes the hazard or reduces the likelihood of the risk of the exposure to that hazard.

For instance, a machine on your manufacturing floor has exposed moving parts, these parts are a hazard that cause the risk of injury to workers. The risk is categorised as high because many workers work near to or pass by the machine.

It is also categorised as high because the potential damage caused by contact with these exposed moving parts is substantial. A very simple control measure would be to provide engineered guarding of the moving parts which eliminates the potential for contact.
The Hierarchy of Control Measures

There is a clear hierarchy of control measures that we need to work through. The first one is to completely eliminate the hazard, eliminating the hazard eliminates any risk of exposure. Of course, this is not always achievable for many reasons. If we can't eliminate the hazard, then we move onto the next step.

Substitution of The Hazard

The next step is to assess whether we can substitute the hazard with something else that provides a lesser risk of harm. Substituting the hazard may not remove all of the risks associated with a process but the overall effect is to lessen the chance of ill effects or harm.

Isolating The Hazard

If you can't eliminate or substitute, the next step is to isolate the hazard. Isolating the hazard is achieved by restricting access to the hazard be that plant and equipment or substances. In the simple example of the water we used earlier, we isolated the water hazard with barriers.

Use Engineering Controls

Engineering controls are used to re-design a process or perhaps a machine to place a barrier between the person and the hazard. They can also be used to remove the hazard from the proximity of the person. For instance, putting guards on machines to reduce risk or moving the operator to a remote position or location from the hazard or process.

Use Administrative Controls

Administrative controls are simply the adoption of standard operating procedures or safe work practices. Providing appropriate training, instruction or information to reduce the potential for harm is also an administrative control.

Use PPE (Personal Protective Equipment)

The very last line of defence is always Personal protective equipment (PPE).
This includes whatever equipment that will reduce the risk of a hazard including gloves, glasses, earmuffs, aprons, safety footwear, respirators and dust masks. It is important that you never rely solely on PPE because it tends to be a weak measure. For instance, wearing earmuffs may help reduce exposure to noise only if they are worn correctly, which they are most often not. In this case, isolating or dampening the noise source and supplying custom hearing protection is a better way to reduce the risk from the noise hazard.
Controlling the risks in the workplace

As part of managing the health and safety of your business you must identify and control the risks in your workplace. Although each workplace is different and may have different risks, the process of doing so remains similar. The risks in an office may be far different to the risks on a building site but the key is that there is risks or hazards at both sites that you need to identify and reduce.

To do this you need to think about what might cause harm to people at those sites and decide whether you are taking reasonable steps to prevent that harm. This process is known as risk assessment and it is something you
are required by law to carry out. If you have fewer than five employees you need to conduct the assessment, but you don’t necessarily have to write anything down.

We would advise that you do record it though, because it will show that you have undertaken the process and it will help with mitigation if an incident occurs.

The HSE states that

_A risk assessment is not about creating huge amounts of paperwork, but rather about identifying sensible measures to control the risks in your workplace_

You may well be already taking steps to protect your employees, but an in-depth risk assessment will help you decide whether you have covered all you need to. Consider how accidents and ill health could occur in your workplace and concentrate on real risks, those that are most likely and which will cause the most harm.

Specific risks

For some specific risks like handling chemicals or working at height, other regulations require particular control measures. Your risk assessment can help you identify where you need to look at certain risks and their particular control measures in more detail. So let's talk about how you can assess risks in your workplace.

How to assess the risks in your workplace

There is a simple step by step process to assessment of risks, the steps are as follows:

- Identify the hazards
- Decide who might be harmed and how
- Evaluate the risks and decide on precautions
• Record your significant findings
• Review your assessment and update if necessary

If you are confident you understand what’s involved, you can do the assessment yourself. If you are concerned though, you can use a health and safety professional to undertake the risk assessment.

Two things for you to remember when doing your risk assessment:

• a hazard is anything that may cause harm, such as chemicals, electricity, working from ladders, an open drawer etc
• the risk is the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be

**Identify the hazards**

This is probably the most important aspect of your risk assessment, you need to accurately identify the potential hazards in your workplace. When walking around your workplace you need to consider any hazards. The overall questions you should ask yourself is, what is it about the activities, processes or substances used in this workplace that could injure your employees or harm their health?

When you work in a place everyday it is easy to overlook some hazards, so here are some tips from HSE to help you identify the ones that matter:

• Check manufacturers’ instructions or data sheets for chemicals and equipment as they can be very helpful in spelling out the hazards and putting them in their true perspective
• Look back at your accident and ill-health records - these often help to identify the less obvious hazards
• Take account of non-routine operations (eg maintenance, cleaning operations or changes in production cycles)
• Remember to think about long-term hazards to health (eg high levels of noise or exposure to harmful substances)
• Visit the [HSE website](http://www.hse.gov.uk). HSE publishes practical guidance on hazards and how to control them

There are many hazards with a recognised risk of harm, for example working at height, working with chemicals, machinery, and asbestos or isocyanates. Depending on the type of work you do, there may be other
Decide who might be harmed and how

Think how employees, contractors or visitors might be harmed. Involve your employees, have them make suggestions in relation to what they think the hazards are. For each hazard you need to be clear about who could be harmed, this will help you in controlling the risk. This simply means that you should identify groups of people (eg 'people working in the storeroom' or 'passers-by') not every single person.

Some more good advice from the HSE on this:

- some workers have particular requirements, for example new and young workers, migrant workers, new or expectant mothers, people with disabilities, temporary workers, contractors, homeworkers and lone workers.
- Think about people who might not be in the workplace all the time, such as visitors, contractors and maintenance workers.
- Take members of the public into account if they could be hurt by your activities.
- If you share your workplace with another business, consider how your work affects others and how their work affects you and your workers. Talk to each other and make sure controls are in place.
- Ask your workers if there is anyone you may have missed.

Evaluate the risks

After identifying the the hazards, you then have to decide what the level of risk is and what you need to do about it. You are not expected to eliminate all risks, however you are expected to make sure you know about the main risks and the things you need to do to manage them responsibly.

Under the legislation, you need to do everything 'reasonably practicable'. This means balancing the level of risk against the measures needed to control the real risk in terms of money, time or trouble. However, you are not expected to take action if it would be grossly disproportionate to the level of risk.

Your risk assessment is only expected to include what you could reasonably be expected to know. You are not expected to anticipate unforeseeable risks that may occur. This is a common misnomer, if an accident occurs
from a risk or hazard that is completely unforeseeable you are not in breach of your health and safety requirements. Look at what you're already doing, and the control measures you already have in place. Ask yourself:

- Can I get rid of the hazard altogether?
- If not, how can I control the risks so that harm is unlikely?

Some practical steps you could take include:

- trying a less risky option
- preventing access to the hazards
- organising work to reduce exposure to the hazard
- issuing protective equipment
- providing welfare facilities such as first aid and washing facilities
- involving and consulting workers

Improving health and safety in your workplace may not need not cost a lot. However, failure to take simple precautions can cost you a lot more if an accident does happen.

**Record your significant findings**

Make a record of your significant findings - the hazards, how people might be harmed by them and what you have in place to control the risks. Any record produced should be simple and focused on the controls you are putting in place.

As we said If you have fewer than five employees you don’t have to write anything down. However, we believe that it is useful to do this for two reasons. In order that you can show that you took reasonable steps and so you can review it at a later date, for example if something changes. If you have five or more employees you are required by law to write it down.

Any paperwork you produce should help you to communicate and manage the risks in your business. For most people this does not need to be a big exercise - just note the main points down about the significant risks and what you concluded. An easy way to record your findings is to use the HSE [risk assessment template](#). When writing down your results keep it simple.

**Requirements of a risk assessment**

A risk assessment is required by law to be 'suitable and sufficient', it should
show that:

- a proper check was made
- you asked who might be affected
- you dealt with all the obvious significant hazards, taking into account the number of people who could be involved
- the precautions are reasonable, and the remaining risk is low
- you involved your employees or their representatives in the process

**Changing work or workplace**

Where the nature of your work changes or the workplace changes and develops (construction site), or where your employees move from site to site, your risk assessment may have to concentrate more on a broad range of risks that can be anticipated.

If your risk assessment identifies a number of hazards, you need to address them in order of importance and dealing with the most serious risks first. Don’t be tempted to use quick fixes, you should identify long-term solutions for the risks with the biggest consequences, as well as those risks most likely to cause accidents or ill health. However, you should also establish whether there are improvements that can be implemented quickly, even temporarily, until more reliable controls can be put in place.

*Remember, the greater the risk the more robust and reliable the control measures will need to be.*

**Review your risk assessment and update if necessary**

It is important that you review your risk assessment, very few workplaces stay the same year in year out. Sooner or later, you will bring in new equipment, substances and processes that could lead to new hazards. It makes sense to review what you are doing on an ongoing basis, look at your risk assessment again and ask yourself:

- Have there been any significant changes?
- Are there improvements you still need to make?
- Have your workers spotted a problem?
● Have you learnt anything from accidents or near misses?

It is important to you and your employees that you make sure your risk assessment stays up to date. You need to ensure that all of your health and safety precautions and risk analysis are a continuous, ongoing process. This will help you to keep risks as low as reasonably possible.
Health and Safety For Your Business

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