

Planning for Risk Management

► The first stage of risk management is hazard identification. After hazards have been identified, the magnitude of the risks is evaluated and decisions are made concerning the control measures that need to be taken to reduce them.

Classification of risks

The SME Risk Management Toolkit includes many tools for the identification of hazards. All identified hazards cannot be removed immediately. This is why the magnitude of the risks should be evaluated before deciding on the measures that should be taken to manage them.

The magnitude of a risk depends on a combination of two factors:

- **Probability:** The more often or more likely it is that a harmful event occurs, the greater the risk; and
- **Consequences:** The greater the loss when a harmful event occurs, the greater the risk.

When the likelihood and severity of harm are evaluated, the following issues must be taken into account:

- How often do situations occur where an accident is possible? What contributory factors are involved, e.g. rushing, poor working conditions or difficult-to-use machinery?
- What could the accident typically lead to? What is the worst case that is reasonably foreseeable?
- How many products, customers, employees etc. could the accident and its consequences have an impact on? Which tasks, projects etc. are affected?
- The indirect consequences of accidents are often much greater than the immediate loss.

The following table is sufficient for most needs when evaluating the magnitude of a risk:

Probability of event	Severity of harm		
	Slightly harmful	Harmful	Extremely harmful
Highly unlikely	Trivial risk	Tolerable risk	Moderate risk
Unlikely	Tolerable risk	Moderate risk	Substantial risk
Likely	Moderate risk	Substantial risk	Intolerable risk

NB 'Tolerable' here means risk has been reduced to the lowest level reasonably practicable. Based on BS8800, Annex D

At this stage, if it hasn't been done already, risks should be written down so that they aren't forgotten. The Risk Management Control Measures [summary sheet](#) included in the SME Risk Management Toolkit can be used for this.

Implementation plan for risk control measures

After hazards have been identified and their level of risk evaluated, it is time to plan **control measures to eliminate the problem**. Ideas for eliminating problems may have already emerged during the process of hazard identification. It's worth writing down all the suggestions on the summary sheet. There are variety of ways to manage risks. The main risk control strategies are:

- **Avoiding risk.** This is often only possible if the activity in question is stopped completely.
- **Reducing risk.** The primary aim is to minimize the occurrence of accidents and/or their effects.
- **Transferring risk.** This is usually done by agreements or

through insurance.

- **Keeping risk.** Some risks are kept and any losses are absorbed by the company (this can happen if risks are not fully identified).

Control measures for reducing risks include:

- **Technical** measures, such as new equipment or workspace solutions, the development of machine safety, technical backups, alarm systems or improvements to servicing and maintenance
- Measures related to the **organisation's operation**, such as agreeing on common rules, compiling instructions, the development of control or monitoring, improving the flow of information and work planning, or agreeing on responsibilities
- Measures improving the operational capabilities of an **individual**, such as the provision of new equipment, work clothing or personal protection, instructions, guidance and training, and new working arrangements

Describing the effects of the control measures

Next, **brainstorm and write down** all the possible effects of a suggested control measure. Think about how an effective control measure or the elimination of a hazard could improve, for example, sick leave; occupational accidents; lead times; quality; service needs; other tasks; employee morale; and the flow of information etc.

What kinds of **costs** does the control measure involve (planning costs, investment in equipment and the need for training, for example)? Does the control measure have any negative effects? How do you think people will receive and accept the change?

Assessing the costs and benefits

After the costs and benefits of implementing the measure have been documented, they can be

priced if necessary. The calculations don't need to be precise and can be estimated, for example:

Benefits	Value in money
• Reduced sick leave	£ 10,000
• Faster work flow	£ 17,000
• More space	£ 1,000
• Improved quality	£ 16,000
Savings per year	£ 44,000

Costs	
• Investment in equipment	£ 8,000
• Training	£ 5,000
Total costs	£ 13,000

Deciding which control measures to implement

Alternative control measures are compared, and the most cost-effective selected for implementation. A balance needs to be achieved between the costs of effective control measures (time, effort, resources, etc.) and the level of risk involved (likelihood and possible severity of consequences), in order to arrive at a 'reasonably practicable' solution.

The following issues, among others, affect the selection of a control measure:

- The magnitude of the risk
- All the likely benefits to be achieved by the control measure
- The costs of controlling the risks
- The ease or difficulty of implementing the control measure
- Whether the proposed control will achieve compliance with legislation, standards, company policy, etc.

Monitoring

A responsible person must be appointed and a schedule drawn up for the implementation of control measures. The introduction,

efficacy and proper use of the control measures must be monitored regularly and following significant change.

Make sure that attention is given to the following issues when making decisions concerning the implementation of a control measure:

- A responsible person has been named
- A schedule for implementation has been agreed
- If a control measure needs to be implemented immediately, how is it to be done?
- How is the efficacy of the control measures maintained?
- How is the monitoring arranged?
- Does the implemented control measure reveal other new risks?
- How does the control measure affect other work, projects and deliveries, for example?
- What happens if the agreed control measure is not implemented?

An example from an engineering workshop

Due to poor health and safety management, a machine repair shop had several risks associated with engine servicing. As part of risk control, investment was made in a 'fitting stand'.

The expected and achieved benefits were:

- Better working conditions
- Better occupational safety
- Less sick leave and fewer accidents
- A reduced risk of serious accidents and interruptions in production

The following were achieved as a bonus:

- Improved employee morale
- A more efficient use of space
- Less need for servicing
- Improved productivity
- Better quality
- Improved customer satisfaction

In addition to planning and purchases, the required investment included changes made to working methods and the employees' tasks. The costs and benefits were roughly calculated for a two-year pay-back period (required by the company) and it looked financially positive.

At first, the acquisition of the stand seemed expensive. However, a preliminary assessment (including unexpected benefits) indicated that the costs would be quickly recouped. Although the investment had been made for safety reasons – there were positive effects in other areas e.g. quality and production.