

A PRACTICAL GUIDE
FOR SMALL ORGANIZATIONS

ISO 45001:2018

Occupational health and safety management systems

Advice from ISO/TC 283



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1. Foreword

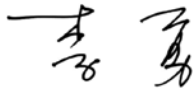
The power of small businesses cannot be underestimated. In around 100 countries worldwide, more than two thirds of total employment comes from small economic units. These businesses play a pivotal role in the global economy and the livelihood of countless numbers of people. The negative effects of workplace injuries, illness or fatalities is a challenge for all kinds of businesses but can prove overwhelming for smaller organizations. Today, more than ever, ensuring a safe and healthy work environment is an important element of doing business worldwide.

ISO 45001:2018 is the world's first international standard on occupational health and safety (OH&S) management, containing agreed good practices from across the world. The primary focus of implementing an OH&S management system is to prevent any kind of work-related injuries, illness or loss of life. Beyond protecting workers, this can lead to better workforce morale, improved products or services and a stable revenue flow. The requirements of the standard assist small organizations as much as they do global conglomerates, governments and society as a whole.

To support smaller entities, both public and private, the International Organization for Standardization (ISO) and United Nations Industrial Development Organization (UNIDO) have joined forces to publish this handbook on ISO 45001.

Authored by experts from a working group under the ISO technical committee ISO/TC 283 “Occupational health and safety management”, the handbook pays special attention to the needs of small businesses and provides explanation, as well as practical examples, to main clauses of the standard.

We hope this handbook will support your organization’s effort in creating a safe workspace and help you reap the benefits offered by ISO 45001.



LI Yong
Director General
UNIDO



Sergio Mujica
Secretary-General
ISO

2. About this handbook

This handbook is aimed at small organizations. It provides an overview of the ISO 45001:2018 requirements and sets out approaches for small organizations to implement them, to help you establish an occupational health and safety (OH&S) management system.

While the primary purpose of implementing an OH&S management system is to prevent fatalities, injuries and ill health, there are many other benefits. These include a potential for:

- ▶ improved OH&S performance in your organization, protecting those who work for you and others who could be harmed by your activities;
- ▶ better management of OH&S risks;
- ▶ better identification of opportunities to improve OH&S management;
- ▶ a better approach to incident investigation;
- ▶ a more cooperative culture for greater worker engagement and empowerment;
- ▶ pursuing positive OH&S initiatives that are compatible with your business priorities;
- ▶ improvements in product, process and service quality;
- ▶ better workplace morale;
- ▶ improved employee recruiting and retention; and
- ▶ a more favourable image and reputation (among customers, suppliers and the community).

The impact of work-related fatalities, injuries or ill health on a small organization can be overwhelming. The effects can include reduced revenue, overtime costs, increased injury and ill health costs, and can even result in a small organization closing. Even larger organizations can experience significant negative effects. Such occurrences are even more devastating if an organization is a family-based operation and the injured or killed worker is a family member.

Each section explains the requirements, why they are important and provides hints on how to go about meeting them. There are also examples for you to adapt to your own needs.

This handbook does not add to or change the requirements of ISO 45001:2018 and the advice given is just that : advice. There are many ways to meet the requirements; however, it is important that each organization develops a system that works for the organization.

ISO 45001:2018 aligns with other ISO management system standards such as ISO 9001:2015 (quality) and ISO 14001:2015 (environment). The top-level structures are identical, and many requirements are the same and can be easily integrated into the organization’s business processes. However, there are also significant technical differences, with additional requirements that are specific to OH&S. If an organization has implemented other ISO management system standards, such as ISO 9001, it will have many of the components common to most management systems in place, for example, an understanding of the context of the organization, competence, documented information, internal audit, nonconformity and corrective action. The task for organizations is to include the remaining OH&S management system requirements into their existing management system(s) and address the remaining OH&S-specific requirements.

All ISO management system standards use the same, simple concept : Plan, Do, Check, Act. This is often referred to as the “PDCA cycle”. The way that the PDCA cycle relates to ISO 45001 is explained and illustrated below.

When you implement an OH&S management system you must understand your context — who you are, what you do, where you do it and who could get ill or hurt. You must also take the lead on making your workplace healthy and safe and get the workers involved.

Plan

plan what you need to do to prevent workplace ill health and injuries and how you are going to do it

Do

do what you say you are going to do

Check

check how well it is working

Act

fix problems and look for ways to make what you are doing even more effective

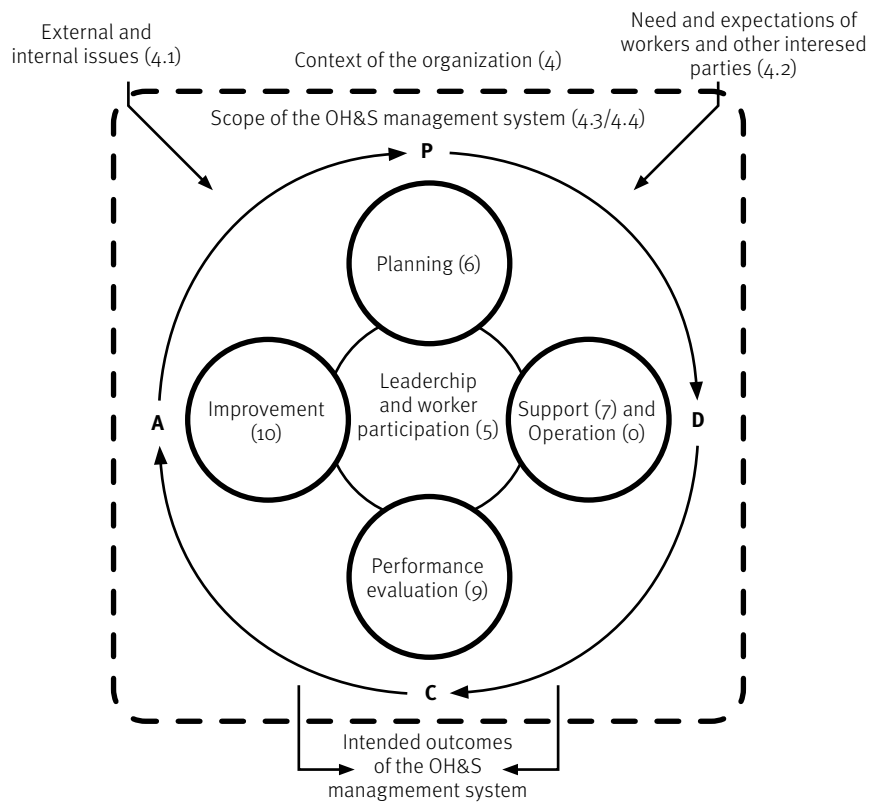


Figure 1: The PDCA cycle in ISO 45001

Since this handbook does not include the text of ISO 45001:2018, you should obtain a copy from your national standards body (find your country and contact details from the list at www.iso.org/members.html) or from ISO (www.iso.org/store.html). The requirements are in the main body of ISO 45001:2018, but you might also find the explanatory information given in Annex A very useful.

The sections that follow relate directly to the numbered clause structure of ISO 45001:2018 (Clauses 3 to 10).

3. Terms and definitions

What it is and why is it important?

Clause 3 of ISO 45001:2018 lists terms which are used in the standard with a technical definition. These definitions are not exactly the same as the usual dictionary definitions, so it is important that you as a user of ISO 45001:2018 take the time to understand them, so that you know what is meant by the requirements and how they apply to your management system.

All terms and definitions can be found at <https://www.iso.org/obp/ui>, as well as in ISO 45001:2018.

4. Context of the organization

4.1 Understanding the organization and its context

What is it and why is it important?

Understanding all the different factors that can affect your business activities is essential for effective OH&S management and preventing people becoming ill or getting injured because of work. It is important to consider issues both inside and outside of your organization that can impact your OH&S performance. This includes, for example, the hazards associated with your work activities as well as laws or regulations.

Implementation approaches

To set up a management system that works for you, you need to fully understand your organization. For example, what does your organization do? Where do you do it? Who could get hurt? How? You also need to consider what can improve – or lessen – your OH&S performance. These can be factors inside your own business or changes in how you do business, as well as external factors such as new laws or pressure from suppliers or customers. Use your current and past health and safety

issues as a starting point for analysing your context. Aim to keep your OH&S system simple and in proportion to your organization's risks and opportunities (see 5.1). You might prefer a more structured method, such as looking at your organization's strengths, weaknesses, opportunities and threats (SWOT) to quickly identify any OH&S issues. These can then be reviewed to see which are the most important. When starting, focus on areas where there will be the most benefit, and work to eliminate or reduce the risks that impact your OH&S performance most.

A small organization is often less complex than a larger one, so if this is true for you, your context is simpler, and the assessment will be too. However, small doesn't always mean simple and large doesn't always mean complex. So smaller organizations that are more complex should make a more detailed assessment of their context to make sure nothing is missed.

4.2 Understanding the needs and expectations of workers and other interested parties

What is it and why is it important?

Your workers obviously have a personal interest in how you manage OH&S: they are the people most likely to become ill or to be hurt if you don't manage the risks effectively. Therefore you need to address their needs and understand their expectations. Getting ongoing input from workers, by involving all workers, and through worker representatives (if you have them) will give you valuable information. You can do this in lots of ways, both informal (e.g. during regular workplace meetings or using suggestion schemes) and formal (e.g. health and safety committees, or other meetings with trade unions and worker representatives). Do what suits your organization best and don't be limited by one method if using several gets more people engaged and actively contributing. Other interested parties – such as visitors, neighbours, customers, regulators and service providers

(e.g. medical clinics, local fire department), etc. – can also have an impact on the OH&S performance of your management system and need to be considered.

Implementation approaches

As mentioned above, your workers are the most important interested party when considering OH&S. Listen to them (and any representatives), talk to them and consult with them on decisions about OH&S management. They usually have a good understanding of most of the risks they face day-to-day, and they also know what really happens in the workplace. You are more likely to get their engagement, and your system is more likely to succeed, if you involve them.

Other important groups can include:

- ▶ your supply chain: sometimes contracts require evidence that you are managing your OH&S, maybe through a standard such as ISO 45001:2018 or through other evidence (e.g. policies, processes or trade association assessment schemes);
- ▶ contractors: you need to manage the risks when contractors are carrying out work, so you need to know what they are intending to do and how;
- ▶ customers, visitors, members of the public and local communities: they can be affected by your work activities or can impact upon what you do;
- ▶ emergency services: sometimes you need to inform them about specific hazards, so that they are prepared if they are called out to an incident;
- ▶ insurers: sometimes they have specific requirements for how you manage OH&S and can ask for evidence of how you will meet those requirements; and
- ▶ regulators: they can choose to look at how good your management system is when assessing whether you are complying with OH&S law.

As you think about issues affecting different interested parties and possible requirements for your OH&S management system, you can use a simple approach such as asking, “what if?” questions. For example: What if this scenario happens? Who could be harmed, and how? You can also go down to a level of activities

and tasks, allowing for a thorough analysis of the situation that includes full worker participation.

Don't just get input from workers, even though this is important : think about how to involve other interested parties, so that you also understand their needs and expectations.

Once you choose which needs and expectations (other than legal requirements) you will comply with, these become requirements the organization must meet, at the same level as legal requirements.

Example: Consideration of context issues (4.1) and needs and expectations of interested parties (4.2)

A small organization with 17 workers supplying products locally, has identified **factors that can affect its activities and OH&S management system, including:**

Internal issues

- an experienced manager is due to retire;
- turnover is increasing, and new workers will be needed;
- new workers will need to be recruited, trained and be competent to do their jobs safely;
- machinery is old and will need replacing shortly;
- the new IT system covering workflow is not fully understood by workers;
- there is conflict between managers;
- responsibility for facilities in the workplace is shared with the landlord who will not commit to updating the electrical supply and wiring;
- increased turnover is putting pressure on you to extend working times;
- workers have said they want more contact with the boss and more say on how activities are performed;
- a serious injury has occurred and needs to be investigated to avoid another such incident; and
- you are considering using new materials or producing new products, leading to changes in hazards and risks.

External issues

- an important licence for the business is due for renewal at the end of the year and is essential to continue normal work;
- an external audit has been carried out and has made recommendations on how to meet new laws that will apply in the next six months;
- the external audit also recommended a review of how contractors are selected and how workers are involved in assessing risks of their work;
- the machinery retail-supplier no longer exists, but leasing is available;
- customers are becoming more demanding;
- neighbours have complained about noise; and
- the regulator is due to make visits in the area and is targeting falls from heights and work-related ill health.

4.3 Determining the scope of the OH&S management system

What is it and why is it important?

Determining the scope of the system is important because this is when you decide what the system covers and what it does not cover. The scope should only be determined after you have identified your internal and external issues, and understand the needs and expectations of workers and other relevant interested parties. You need to document the scope in whatever way suits you – for example, an electronic or paper document, an audio or video recording or even a visual display.

Implementation approaches

When you decide the scope for the OH&S management system you need to consider all of your work activities, including those that are not day-to-day, such as maintenance and foreseeable emergencies. This should include all activities that you can control, as well as those you don't fully control but can influence, such as outsourced activities: in fact, anything that can impact your OH&S performance.

4.4 OH&S management system

What is it and why is it important?

An OH&S management system is a systematic way to identify workplace hazards, and assess risks and opportunities in order to achieve its intended outcomes, which are to:

- ▶ prevent ill health and injury, and;
- ▶ make workplaces healthy and safe.

To make sure it works as intended, your OH&S management system needs to be supported by leaders as well as other workers, and regularly reviewed and improved.

Implementation approaches

Every organization can choose how it will meet the ISO 45001 requirements to suit their own business. You decide the extent to which your organization can integrate OH&S processes into general business processes, so that you are preventing work-related ill health and injury, and still meeting your business objectives. For example, business goals should not mean people working so fast that it leads to safety shortcuts or burn out.

The basic framework of an OH&S management system follows the “Plan, Do, Check Act” format, which is explained in the section entitled ‘About this handbook’.

Once the organization's context is understood, and hazards and risks have been identified, then it is advisable to start by addressing a small number of important issues so that significant improvements can be made and sustained. Over time, additional issues can be tackled.

5. Leadership and worker participation

5.1 Leadership and commitment

What is it and why is it important?

Leadership is motivating a group of people to act towards achieving common objectives. In the context of OH&S, leadership is essential to help set values and maximize efficiency and so achieve the agreed OH&S performance objectives. It is critically important that leaders set OH&S objectives through consultation and participation with the rest of the workers.

Leadership at different levels of management is essential for an effective OH&S management system. Effective managers deliver the message that worker health and safety is a top organizational value equal to business growth, on-time performance and profitability. Maintaining worker health and safety as a top-level value creates a foundation for a strong, positive, culture that supports OH&S. It facilitates trust and cooperation between senior decision-makers (top management) and workers that can extend beyond OH&S into other operations. Over time, good health and safety performance tends to improve business growth, profitability, worker retention, and product and service quality.

Implementation approaches

Leaders can demonstrate their commitment to OH&S by providing the necessary resources and communicating a clear vision of OH&S for the organization. Top management is responsible and held accountable for the health and safety of workers. Here are some fundamental management leadership activities to consider:

- ▶ develop and use effective ways of communicating the OH&S policy and why it is important in improving health and safety;
- ▶ use different ways of communicating to address literacy issues and disabilities, such as visual and hearing impairment;
- ▶ identify hazards to manage OH&S risks;
- ▶ analyse data from feedback and observations;
- ▶ develop objectives to reduce risk levels associated with hazards;
- ▶ monitor and evaluate the extent to which OH&S is integrated into business processes;
- ▶ monitor and evaluate the OH&S management system for effectiveness and improvement;
- ▶ establish an effective process for worker participation and consultation;
- ▶ apply the necessary corrective actions; and
- ▶ identify and lead the implementation of work practices and initiatives that drive a strong, positive, culture that supports OH&S.

There are approaches that have been shown to be effective in implementing an OH&S management system. The following ideas can help you ensure your organization's OH&S management system operates effectively and continually improves OH&S performance:

- ▶ establish and support a functional health and safety committee;
- ▶ involve workers in all aspects of the implementation of the OH&S system, using the Plan, Do, Check, Act cycle;
- ▶ give workers the resources needed to improve OH&S performance, including the ability to report incidents and hazards;

- ▶ support the efforts of other managers in developing their leadership skills in OH&S;
- ▶ reach workers using personal interactions, such as pictures (for those who have difficulty reading), notice boards, staff meetings and posters;
- ▶ encourage workers to increase their understanding of the requirements of the OH&S management system;
- ▶ encourage workers to make recommendations for improvement and to report hazards or incidents;
- ▶ ensure workers are free from reprisals when they do report something;
- ▶ encourage workers to perform at the highest levels of health and safety; and
- ▶ give workers the appropriate levels of training to do their job and improve OH&S performance.

5.2 OH&S policy

What is it and why is it important?

The OH&S policy is a statement of key principles that reflects management's commitment to OH&S. It sets the intention and direction for the organization and describes the expected results from systematically managing health and safety. Therefore, the most senior level of management (referred to as "top management" in ISO 45001) is responsible for developing, implementing and maintaining it. It is important for the success of the organization's OH&S management system.

Implementation approaches

Make the policy visible and available in your organization so that it informs workers, contractors, subcontractors and other organizations on which you are dependent. Explain what the policy means to them, including your commitment towards

continual improvement of OH&S performance both at an organizational and an individual level. The following are a few things to keep in mind :

- ▶ keep the policy short and simple, using clear understandable language ;
- ▶ check that the policy is aligned with other policies in the organization and that the commitments are relevant to the organization's challenges ;
- ▶ involve workers at the earliest opportunity in the development of the policy, e.g. by asking them for suggestions on how to better control hazards and risks and involving them at policy development meetings ;
- ▶ inform workers how the policy affects them, so they understand its relevance to their work activities and keeping them and others healthy and safe ;
- ▶ focus on the OH&S policy at regular meetings, so that workers and contractors understand its importance ;
- ▶ the policy could be presented during meetings and training sessions, as a poster, as a web page or anything else that fulfils the organization's needs ; and
- ▶ define dates and other triggers for reviewing the policy and let workers and other interested parties know about any changes that are made.

5.3 Organizational roles, responsibilities and authorities

What is it and why is it important ?

Identification and communication of operational roles, and related responsibilities and authorities, are essential for the implementation and function of the OH&S management system. This often requires initiatives to raise awareness and specific training to gain the necessary competence.

Implementation approaches

Workers at each level of the organization have responsibilities and authorities related to their roles in the OH&S management system. Every person in the workplace needs to consider not only their own health and safety, but also the health and safety of others. Some key points for effective OH&S management include :

- ▶ establishing responsibilities and authorities to specific roles to ensure the OH&S management system meets ISO 45001 requirements ;
- ▶ establishing a way for reporting on the performance of the OH&S management system to top management on a regular basis ;
- ▶ defining and regularly communicating roles, responsibilities and authorities for implementing and maintaining the OH&S management system ;
- ▶ making sure that everyone knows the responsibilities and authorities related to their role: what is delegated, and to whom, should be clear and communicated effectively so that everyone affected understands who is responsible for what ;
- ▶ giving people in charge of OH&S a visible position in the organization ; and
- ▶ taking into account other roles in the organization that can impact or contribute to OH&S performance.

When looking at roles, responsibilities and authorities, start by examining the current organizational structure. The creation of an organizational chart can be useful to highlight the most common OH&S relationships, responsibilities and authorities. Identify the current roles that are responsible or best suited to be responsible for OH&S management. Consider the operations that present hazards and OH&S risks and the actions that need to be taken to ensure this is managed as required. Identify who needs to be involved to ensure these operations are controlled and the identified actions are performed.

Assign OH&S roles, responsibilities and authorities with the same degree of formality that other operational roles, responsibilities and authorities are assigned. Ensure the people assigned are competent to perform their OH&S roles and have the necessary resources and authority to fulfil their responsibilities.

The responsibility for overall coordination of OH&S management system implementation can be assigned to a single person or a team. Promoting good OH&S, being knowledgeable and having easy access to top management are critical for success. OH&S responsibilities and authorities should be included in job descriptions and in performance goals.

OH&S expertise in the form of your workers' knowledge, skills and experience is often available within the organization. However, technical OH&S expertise isn't always available within small organizations; therefore external help may be needed.

5.4 Consultation and participation of workers

What is it and why is it important?

Worker consultation and participation means that workers are involved in establishing, operating, evaluating, and improving the OH&S management system. Worker consultation and participation can be a basis for building a positive culture that supports OH&S. Consult workers and, where they exist, their representatives, and give them genuine opportunities to participate. Include those employed by contractors, subcontractors and temporary staffing agencies who conduct work activities under the control of your organization.

To be effective, any OH&S management system needs meaningful consultation and participation of workers and, where they exist, their representatives. Your workers have a lot to gain from a successful systematic approach and the most to lose if the system fails. They also often know the most about hazards associated with their jobs and how to resolve them. Successful OH&S management systems tap into this knowledge base.

In an effective OH&S management system, workers and, where they exist, their representatives:

- ▶ are involved in decision-making;
- ▶ are encouraged to participate in the system and feel comfortable providing input and reporting health or safety concerns;
- ▶ have access to the information and training they need to participate effectively in the system;
- ▶ have opportunities to participate in all phases of system design, implementation and evaluation; and
- ▶ do not experience retaliation when they:
 - ▶ raise health and safety concerns;
 - ▶ report injuries, illnesses or hazards;
 - ▶ give feedback on or participate in the OH&S management system;
 - ▶ suggest OH&S improvements and OH&S opportunities;
 - ▶ exercise their health and safety rights.

Implementation approaches

A first step in the process of worker consultation and participation could be having a meeting or series of meetings in which the organization's owners (or top management) communicate their vision, values and commitment to establishing an OH&S management system. In those first steps, you should also ensure that workers know that their consultation and participation is needed, required by ISO 45001:2018 and valued.

Workers engage meaningfully in the system when they feel that their input is welcome, their voices heard, and they can access reporting mechanisms. Consultation and participation will be stifled if language, education or skill levels in the workplace are not considered, or if workers fear retaliation or discrimination for speaking up. For example, this could occur if investigations focus on blaming individuals rather than dealing with the underlying conditions that led to the

incident, or if reporting an incident or concern leads to incentive-based prizes, rewards or bonuses not being awarded. Some guiding principles for encouraging participation include:

- ▶ making sure workers are aware of how they will be consulted and can participate in the OH&S management system;
- ▶ making sure workers from all levels of the organization can participate, regardless of their skill level, education or language;
- ▶ providing frequent and regular feedback to show workers that their health and safety concerns are being heard and addressed;
- ▶ recognizing and rewarding good OH&S performance;
- ▶ authorizing enough time and resources to help workers participate: for example, hold OH&S meetings during regular working hours, including where shift work exists;
- ▶ protecting workers from retaliation;
- ▶ ensuring other policies and systems do not discourage participation; and
- ▶ encouraging and facilitating worker representatives to participate.

Strategies that can encourage worker participation include:

Activity	Strategy
Notice board or writable board with OH&S activities	<ul style="list-style-type: none"> • use a board or wall to make OH&S activities for workers visible; • elements to include on the board: e.g. policy, objectives, and action plans; • use the board as a communication tool; and • conduct meetings with workers around the board.
Training needs	Make a simple plan to address competency and/or training needs for work groups and individual workers, setting out how training will be evaluated.
Encourage worker commitment by working in groups	<p>Let workers:</p> <ul style="list-style-type: none"> • identify OH&S problem(s); • develop a risk assessment for identified problem(s); • develop action plans and evaluate them; • engage in regular safety inspections; • conduct job hazard analysis; • conduct incident investigations; and • propose corrective actions.
Getting help	Identify workers who can consult on complex or technical OH&S problems.

6. Planning

6.1 Actions to address risks and opportunities

6.1.1 General

Planning is determining what you want to achieve and what you need to do to meet the intended outcomes of the OH&S management system. Through planning, you decide how to use your resources to improve OH&S and what actions to prioritize. Without planning, you leave this to chance. Planning helps you to manage risks rather than waiting for an incident to occur before acting.

When planning for a successful OH&S management system, including setting your OH&S objectives, you need to think about:

- the hazards to workers and the OH&S risks posed by these hazards;
- opportunities to improve your OH&S performance;
- risks to the performance of your organization's OH&S management system;
- opportunities to improve your OH&S management system; and
- your legal requirements and other requirements regarding OH&S.

These conditions are usually influenced by the context of your organization, the needs and expectations from workers and other interested parties, and by the scope of your management system. Before you set your OH&S objectives, you need to plan the actions required to address your risks and opportunities and your legal requirements and other requirements.

Also, as you plan, if you intend to make some changes in your organization, processes or practices, you need to examine whether those changes would bring new risks or opportunities and consider them before making the changes.

This section works through the steps you need to take.

6.1.2 Hazard identification and assessment of risks and opportunities

6.1.2.1 Hazard identification

What is it and why is it important?

Hazard identification helps you recognize and understand the hazards from work activities in your organization.

Hazards in the workplace will challenge your ability to ensure it is a healthy and safe place to work. To prevent ill health and injury, by using an OH&S management system, you need to know what hazards at your workplace can cause harm. Some hazards are obvious, such as noise, heat, working at heights, and slippery surfaces. Other hazards will need to be further investigated before you recognize that you have a problem. That is why it is important to take into account hazards in various situations, including work organization, the various work activities, potential emergencies and the people affected. Hazards can arise from many different sources. These are often categorized as:

- ▶ physical (e.g. working at heights, slippery surfaces, confined spaces, extreme temperature, extreme pressure, electrical);
- ▶ chemical (e.g. direct or prolonged exposure to harmful chemicals);
- ▶ biological (e.g. diseases from animals, exposure to bacteria);
- ▶ psychosocial (e.g. repetitive work, bullying, harassment);
- ▶ mechanical (e.g. crushing, manual handling); and
- ▶ organizational (e.g. workload, tight deadlines).

Implementation approaches

A systematic approach will help you identify your hazards. First, look at your work processes and practices – routine and non-routine – and think about what hazards might exist at each step. Include materials and products you use, the production and disposal of waste (chemical and biological hazards), the workplace itself and its layout, the use of equipment (mostly physical and mechanical hazards). You should also examine the way the work is organized (e.g. working hours, workload, and work rate), psychosocial factors (victimization, harassment, bullying), and leadership and cultural factors. Asking workers will give you an insight into what the hazards are: how could someone get hurt? It can be useful to write your processes down, task by task, and for each process ask: “are there any hazards here?”.

Second, you need to analyse where the work takes place and if there are any hazards there, for example, road traffic, dangerous machineries, chemical waste, heat, and cold.

You could further your investigations by looking at guidance from regulators, health and safety professionals, unions or OH&S insurance bodies and, if necessary, asking their advice. This can help identify hazards:

- ▶ in your work processes and practices: physical inspection of the workplace, either done by yourself or by third parties; and
- ▶ from materials and equipment (information can also be taken from manufacturers and suppliers of equipment and materials such as technical manuals, chemicals’ safety data sheets and product labels).

For all types of hazards:

- ▶ tap into the knowledge of workers by asking questions such as: What is hazardous? What can go wrong? What has gone wrong before?
- ▶ investigate incidents, including ill health and injury records;

- ▶ consult guidelines, newsletters and tools from advisors, authorities and organizations (especially those for your sector), articles and newsletters from researchers; and
- ▶ use findings from internal or external health and safety inspections and audits.

6.1.2.2 Assessment of OH&S risks and other risks to the OH&S management system

What is it and why is it important?

The hazards that you identify can lead to ill health or injury. Considering the kind of ill health or injury along with the potential severity and probability will help determine the size or level of the risk.

You need to assess and prioritize the different risks to target the right problems. Unfortunately, not all hazards can be eliminated, even though elimination is the most effective way to minimize risk. When a hazard cannot be eliminated, you need to assess the level of risk associated with this hazard: for example, low, medium or high. As mentioned previously, this will depend on the probability of the potential ill health or injury occurring, and the potential severity of its impact. Assessing the level of risk in this way will help you determine what to prioritize. In addition to the risks to workers' health and safety or others affected by your activities, there are risks to your management system. These can come from inside or outside your organization, often because of change that influences your management system's effectiveness. You will have identified some of these potential sources of change when you looked into the context of your organization; now you need to assess these risks so you can take the necessary measures to prevent negative impacts on how your OH&S management system is working.

Implementation approaches

For most OH&S risks, an Internet search will deliver methods developed and published by other organizations, advisers and authorities – such as a national regulator and other reliable sources. Their advice is often available for free. Some methods may require specific equipment or special expertise.

For risks associated with operational OH&S, you should involve workers through participation, in the process of assessing the OH&S risks in the areas in which they work, including workers from other parts of the organization who could bring a fresh insight to the hazards and OH&S risks and ways to control them. In this way, not only will you gain from their knowledge, but the experience they gain during these exercises will benefit their understanding of the need for prevention and control measures.

For risks associated with the management system, the methods will, to some degree, be the same that you use to recognize the risks to your production and organization.

For a thorough assessment of an OH&S risk, you must deal with issues such as:

- ▶ the severity of the potential consequences (death, serious harm or illness, minor injury or disease) from the identified hazards;
- ▶ the probability that this exposure will result in injury or ill health – consider how many times, for how long, and how many workers are exposed to that hazard;
- ▶ whether you have already implemented control measures to minimize this risk and if they are effective.

Combining the answers to all these issues will give you an understanding of the risk level. Think about what can fail when you set or maintain your processes. These potential failures should be checked when doing your site inspections and internal audits.

In many countries, some hazards are regulated and, therefore, maximum exposure levels or limits are defined. By checking those exposure levels in your organization, you can obtain helpful insights of the risk level and which measures to take.

Examples of risks to the OH&S management system are:

- ▶ lack of alignment of the OH&S management system with the management of the organization;
- ▶ poor levels of acceptance of your policy and the system by managers at all levels;
- ▶ ineffective involvement of workers (and, where they exist, their representatives) in the planning, implementation and assessment of the system;
- ▶ lack of resources, including budget and workers;
- ▶ poor quality or inadequate feedback for improvement; and
- ▶ overstating your controls – or the paperwork not matching the reality on the ground.

6.1.2.3 Assessment of OH&S opportunities and other opportunities for the OH&S management system

What is it and why is it important?

OH&S opportunities are those changes or activities inside or outside your organization that have the potential to improve your OH&S performance. This includes opportunities to make positive changes to how work is done as well as improvements to the processes that support the OH&S management system. If you take advantage of these opportunities, you can improve the OH&S performance of your organization, better protect workers and often increase effectiveness.

Implementation approaches

The following can help to identify and assess opportunities that can either improve OH&S performance or the management system itself:

- ▶ new information on management systems that can give you insights into how to improve yours;
- ▶ learning from other organizations that have implemented an OH&S management system, e.g. by visiting the premises or sharing experience;
- ▶ using changes in your organization – planned and unplanned – as prompts to think about how you can more effectively manage OH&S risk;

- ▶ arranging regular meetings with people who implement changes to identify opportunities for progress in OH&S risk prevention or reduction;
- ▶ long-term investments that consider options that can be bought or designed to remove hazards or to limit OH&S risks, for example, by avoiding worker exposure;
- ▶ training workers to recognize, communicate and take advantage of opportunities for improvement;
- ▶ inviting workers and, where they exist, workers' representatives to idea-sharing sessions to discuss opportunities that have emerged from changes in production, services or the organization itself;
- ▶ organizing meetings on a regular basis (e.g. once a week) with the focus on opportunities and issues related to new or upcoming changes in production, services or organization; and
- ▶ asking workers to write down ideas for improvement or concerns on a board between meetings, and discussing issues and ideas at the next meeting.

The following are a few examples of opportunities you might take to improve OH&S:

- ▶ address OH&S issues when planning facilities' relocation or process redesign choosing the most effective equipment and design;
- ▶ invest in new technologies such as automation or digitalization;
- ▶ invest in new equipment with a high level of safety; and
- ▶ invite fresh ideas on healthy and safe ways of working from workers.

6.1.3 Determination of legal requirements and other requirements

What is it about and why is it important?

When planning, it is essential to know the OH&S requirements that you must comply with, whether these are legal requirements or come from somewhere else (e.g. the supply chain or self-imposed). If the outcomes of your planning do not

consider the need for compliance with legal requirements and other requirements, then this gap in your planning can undermine your OH&S management system and what you are trying to achieve.

Examples of legal requirements

- legislation (national, regional or international), including statutes and regulations;
- decrees and directives that apply to your organization and activities;
- orders issued by regulators;
- permits, licences or other forms of authorization that you need to get;
- judgments of courts or administrative tribunals;
- treaties, conventions, protocols; and
- collective-bargaining agreements.

Examples of other requirements (determined by the organization internally or by interested parties, e.g. customers, workers, clients, neighbours)

- contractual conditions;
- employment agreements;
- agreements with interested parties;
- agreements with health authorities;
- non-regulatory standards, consensus standards and guidelines;
- voluntary principles you have chosen to apply, as well as codes of practice and codes of conduct;
- technical specifications and charters; and
- your public commitments or those of your parent organization.

Implementation approaches

You need access to information about the legal requirements and other requirements that apply to your organization. . That includes requirements related to the hazards and OH&S risks that occur in the organization and requirements related to the OH&S management system itself. You should identify the best sources of

information that will update you on changes or new legislation that apply to your organization. You can also get advice from an advisory body, such as a regulator or trade association.

To determine how legal requirements apply to your organization, think about the activities, the OH&S concerns, and what may need to change in your organization or in specific activities in order to meet the requirements. Take the requirements into account when you develop or improve your OH&S management system. Decide what kind of processes you need in your management system to meet the requirements.

“Other requirements” can be determined by the organization internally or through inputs (e.g. concerns and proposals) from interested parties, such as local organizations, clients, and local or specific associations. To understand and stay up-to-date with your other requirements, you can take actions such as:

- ▶ designate one or more workers or an external resource to keep track of any changes to the requirements that apply to you;
- ▶ look for Websites and updates from relevant organizations: e.g. trade unions, chambers of commerce, professional associations;
- ▶ visit Websites of interested parties to see what concerns them and check whether the concerns relate to your organization; and
- ▶ conduct interviews with relevant interested parties.

6.1.4 Planning action

What is it about and why is it important?

Planning actions is crucial to reduce OH&S risks and risks to the effectiveness of the OH&S management system, to take advantage of opportunities, to fulfil legal requirements and other requirements, and to prepare for emergency situations. By planning actions, you can later check that the correct actions have been taken, and if they are effective and have achieved the intended outcomes.

Implementation approaches

Determine:

- ▶ which hazards you will eliminate and which you will keep under control;
- ▶ which risks you need to reduce;
- ▶ which requirements apply to you; and
- ▶ what opportunities are available and advantageous.

Keep in mind what you want to achieve and which resources (e.g. money, time, workers) you can dedicate before setting up your organization's action plan. Your action plan should be integrated and consistent with your other business processes and policies (e.g. financial, quality, business continuity). Try to incorporate the actions with other changes to your organization or its activities. This can help you to extend the benefits of OH&S actions to your business goals.

6.2 OH&S objectives and planning to achieve them

6.2.1 OH&S objectives

What is it and why is it important?

OH&S objectives should define what you want to achieve in OH&S performance and for your management system, i.e. what you want to do to continually improve your OH&S performance and your OH&S management system. Some of your objectives can be broad-based and apply across the whole organization, others can be focused on a department, activity or process.

Your objectives will help you to prioritize what initiatives you should take and how to use your resources. They will also help you assess if the actions you have chosen are likely to deliver the results that you are aiming for. Objectives must be realistic and achievable.

Implementation approaches

Decide what you want to achieve (objectives) related to OH&S performance and set a certain timeframe. This could include the positive outcomes you are expecting from introducing the OH&S management system. Your objectives should be aligned with your OH&S policy and measured and monitored to track your performance. When setting them you should review your overall business goals to ensure that they are aligned. For instance, an organization that wants to reduce costs can benefit from OH&S initiatives that reduce ill health and injury. Be sure to define and approve OH&S objectives before the budget cycle is set so that the necessary resources are identified, and the appropriate funding provided.

When selecting OH&S objectives, you should consult with workers and consider:

- ▶ OH&S competence available in the organization;
- ▶ required resources, including finance;
- ▶ other business objectives in the organization;
- ▶ results from audits, investigations into injuries, near misses incidences of ill health, and management reviews; and
- ▶ outcomes from risk and opportunity assessments.

Objectives can also include maintaining and improving the OH&S management system, especially if your management system is new and you are still testing how effective it is.

Your OH&S objectives should be consistent with the overall business objectives, such as quality, productivity and environment, and should be set at relevant functions and levels, with realistic and achievable timeframes for achievement.

It is useful to set verifiable performance indicators – indicators that can be checked and proven to be accurate – to help you evaluate progress towards your objectives. Indicators can take the form of thresholds for performance or activity ratios, for example:

- ▶ increase the reporting of incidents to improve risk awareness;
- ▶ decrease the number of incidents by 10% within one year;
- ▶ 30% reduction in injury frequency in the next two years;

- ▶ 30% increase in the number of safety tours to all work sites by top management in order to improve risk awareness;
- ▶ 90% of tool-box talks delivered in a year;
- ▶ reduce hazardous substances by 15% within one year;
- ▶ achieve a 90% completion rate for OH&S training;
- ▶ maintain the particles level in the painting room below a specified concentration;
- ▶ maintain the deadline for closing nonconformities below a specific number of days; and
- ▶ maintain a specified minimum yearly training hours per worker.

Be sure to communicate with workers about relevant OH&S objectives and the plans to achieve them, including progress based on indicators and milestones. Having their engagement in supporting these objectives will have considerable influence on successful outcomes to improve health and safety.

6.2.2 Planning to achieve OH&S objectives

What is it and why is it important?

Planning describes what actions you are going to take to achieve the selected OH&S objectives. It allows you to prioritize your resources and time. Planning to achieve is important because it can illustrate whether your objectives are realistic and whether they can be translated into a series of actions that will help you reach your goals.

Implementation approaches

Establishing objectives requires a plan that details the what, how, who and when. Write down a working plan for the following year (or make a visual plan, or whatever works best for your organization), designate resources to implement the actions and evaluate if they give you the benefits that you seek. Use these activities

to promote your ideas on OH&S to show workers, and their families, that their health, safety and wellbeing are important to you.

In planning to achieve your objectives, set the OH&S objectives in order of priority and:

- ▶ identify the actions necessary;
- ▶ assign roles, responsibilities and authorities (e.g. through job descriptions or in minutes of meetings);
- ▶ establish milestones on the path towards achieving the objectives;
- ▶ determine what resources (i.e. people, financial, equipment or external resources) are needed;
- ▶ decide how you will monitor progress on OH&S objectives; and
- ▶ determine when you want to achieve each objective by.

Bear in mind that what you have planned for your organization can change and so can your OH&S plans. This can be due to events such as incidents, changes of laws or changes of ownership. Monitoring and evaluating the effectiveness of your planned actions will allow you to implement corrective actions if your plan falls short of expectations. Be sure to update information on your OH&S objectives and keep your plans up-to-date. If circumstances change, including changes impacting resources, hazards or priorities in OH&S performance, your plans are likely to need revising to take into account the different context.

7. Support

7.1 Resources

What is it and why is it important?

You need to determine the resources you need to achieve the intended outcomes of the OH&S system. Resources include: money, time, people, equipment, organizational knowledge, information and consideration of any corresponding constraints, such as budget.

It is important to ensure enough resources are provided to support your OH&S policy, achieve your OH&S objectives and generally support the OH&S management system to be effective. Your resource needs will change over time, perhaps as objectives are achieved, new hazards identified or the context of your organization changes: therefore, ensure that you review your resource allocation from time to time, to check that it is still meeting your needs.

Implementation approaches

Begin by looking at how your resources are allocated now and how that might need to change to achieve your intended outcomes. Sometimes there might be an obvious gap in resources, or there might be a conflict in how a resource is allocated due to other business needs, or you may have too many resources directed

at something that can be streamlined. By setting out what you need to achieve your intended outcomes, you will be able to identify where a change needs to be made. Ensure that resource planning is done in time for your regular operation reviews and budgeting processes.

When considering resources, take into account:

- ▶ worker time required to evaluate operations, monitor performance, attend training and put the management system into practice;
- ▶ the skills needed to evaluate compliance, respond to emergency situations and perform audits;
- ▶ systems needed to maintain and update relevant documented information; and
- ▶ the technology, equipment and infrastructure available and what might be needed.

Organizations often have resource constraints but external resources can sometimes be available. For example, if your organization does not have the knowledge it needs within the organization, it can often be sourced through:

- ▶ customers – for technical information and assistance;
- ▶ industry associations, the local chamber of commerce or other business intermediary bodies – for information on common work-related hazards, sharing lessons learned, good practice and joint engagement of external resources;
- ▶ universities and other research centres – for information on control technologies or interns to assist in OH&S deployment;
- ▶ regulators – for regulatory information, practical and technical advice, and compliance assistance;
- ▶ insurance companies, compensation bodies and national social security systems; and
- ▶ trade unions and other labour organizations.

7.2 Competence

What is it and why is it important?

Competence is the ability to do a job effectively. All workers need to understand what it means to be “competent” and how this can be achieved and demonstrated. Competence includes the ability to identify hazards and to suggest ways of reducing OH&S risks, how to do the job safely and also to provide input to the OH&S management system.

It is important to understand the competence needs in your organization in order to make your OH&S management system effective.

Implementation approaches

Ensure competence requirements are identified and understood, and that workers have the relevant competence for their work. Competence consists of skills, experience, training and education, and can be demonstrated in different ways, including formal qualifications.

Some tasks might require a defined level of competence before they can be performed safely, e.g. welding or electrical repair work; some may require formal qualification, e.g. for fork-lift or truck driving. The organization will need to identify these competence requirements and ensure they are met. Examples of ways of ensuring competency requirements are identified and met include:

- ▶ determining the competence needed by each worker, including OH&S competence requirements in job descriptions, and evaluating if the current workers have this competence;
- ▶ establishing a training plan and providing workers with OH&S training according to their tasks and roles to close any gap in competency;
- ▶ simplifying the work or activity so that competence requirements are reduced without compromising OH&S performance; and
- ▶ re-assigning work to someone with the necessary competence.

Check the effectiveness of actions taken, e.g. by asking workers who have received training whether they now have the necessary competence to do their work or assessing it through supervised activities, mentoring, field observations and resulting outcomes. When work is carried out by an external provider, you can put in place controls such as setting out competence requirements in contracts, and evaluating compliance and performance goals by performing audits.

Determine your organization's requirements for this, based on how relevant the competence is in ensuring OH&S performance is met.

7.3 Awareness

What is it and why it is important?

Workers need to be competent to know how to do their job. But they also need to be aware of risks and how to do their job safely. This is the basic concept behind the requirement “awareness”.

Implementation approaches

You need to ensure that every worker in your organization and others who can be affected (this includes contractors, suppliers and visitors) are made aware of the OH&S policy, what the OH&S management system is trying to achieve, how it impacts on them and how their own actions can impact it.

You also must ensure that workers are aware of:

- ▶ their own responsibilities and authority to act;
- ▶ how their actions contribute to the achievement of OH&S objectives and the effectiveness of the OH&S management system;
- ▶ the hazards and OH&S risks related to their work activities;
- ▶ how they can prevent an OH&S incident;

- ▶ the consequences on OH&S if they do not follow the OH&S management system's requirements or do not comply with regulations;
- ▶ their right to remove themselves from hazardous work-related situations; and
- ▶ the ways to report, and importance of reporting hazardous situations or emergencies, and the arrangements to protect workers from reprisals.

Appropriate communication is often key to achieving the necessary level of awareness. In some cases, awareness efforts are more effective if they are delivered in simple, short messages that are repeated and reinforced over time, or incorporated into a training course. Another way of ensuring that workers are aware of their OH&S roles, responsibilities and authorities is to involve them in the development of the OH&S management system and identification and implementation of improvement opportunities. Leadership by top management is one of the most effective methods to ensure awareness by all workers. There should be consistency between what top management does and what it tells others to do.

The requirements for competence, awareness and communication are complementary, so the implementation of these requirements can be consolidated or addressed using similar methods, thereby avoiding duplication of efforts. (You can find examples in the table in section 7.4 below.)

7.4 Communication

What is it and why is it important?

Communication is the process of giving people the right information in the right way about the OH&S management system so that they positively contribute to improving OH&S performance and keeping the workplace healthy and safe.

It is important to get communication right to make your OH&S management system effective. This involves identifying who needs to know what and the best ways of conveying that information. It is also important to remember that communication

is two-way: establishing effective ways of receiving information from interested parties is just as important as establishing ways of informing them.

Implementation approaches

It is up to each organization to decide how the communication of information is managed, taking into account the following:

- ▶ key audiences, both internal and external – such as workers, suppliers and contractors, consumers, regulatory agencies, public agencies and local communities;
- ▶ diversity including language, gender, disability, culture, and literacy;
- ▶ what OH&S information needs to be communicated to particular groups – this will vary depending on their needs and how proactive the organization wants to be;
- ▶ methods for communicating this information to the different groups – this should be tailored to the size and complexity of the organization and to the audience’s needs; and
- ▶ the timing and frequency for communications, including prompt responses to queries and complaints.

The starting point is to identify what information is required for and from internal and external interested parties, and then develop a simple method or tool. This includes the arrangements for receiving, recording and responding to relevant communications from interested parties and for providing relevant information in an accessible and timely manner. Consider what information the workers need to support the OH&S management system and performance objectives. Appointing designated workers can be an effective way of ensuring communication is consistent across the organization.

One way to decide how to establish a communication process is to engage various groups within the organization to agree on the best approach or approaches. The most important aspect is to agree what is communicated and how the information can impact the organization. It is also important to determine what information is confidential and how this information is handled.

To meet this requirement, some organizations find it useful to develop a communication matrix, which identifies what is to be communicated, how and to whom. An example is set out in the following table.

Who	What	When	How	Documented information to be retained
Worker	Organization’s OH&S policy, objectives, risks, standards and practices applicable in its workplaces	Induction and annually	At induction and during programmed meetings	Yes
Management team	Progress on objectives	Quarterly and annual review	Management meetings, safety committee meetings, meetings with worker representatives, where they exist	Yes
Contractors, and suppliers	Organizational controls Exchange of information	Initiation of contract, annually and as required	Meetings, by verbal or written communication	Yes
Emergency response team	Emergency response plan	Annually and if new major hazards are identified	Site tours, site scenarios	Yes

Who	What	When	How	Documented information to be retained
External regulators	Reporting of incidents, ill health, dangerous occurrence or what is required by law	As required	Verbally, in reports or by e-mail communication	Yes
Outsourced process	Contractor OH&S requirements Exchange of information	Prior to starting work, at appropriate review points and as required	Audit or reviews Meetings, by verbal or written communication	Yes

The following communication mechanisms can help start the process.

Written communication techniques	Verbal communication techniques
Intranet, Websites	Safety committee meetings
Safety alerts	Interviews, focus groups
Brochures, newsletters	Informal discussions
Safe systems of work, safety instructions	Press conferences
Bulletin boards, posters, displays	Surveys
Letters, e-mail	Site visits, guided tours

Written communication techniques	Verbal communication techniques
Training materials, working instructions, job aids	Presentations, workshops, conferences
Media, news releases, newspaper articles	Worker committees, citizens' advisory groups, community liaison groups

7.5 Documented information

What is it and why is it important?

Documented information can be viewed as serving two critical purposes:

- ▶ to ensure activities and safety measures continue as stated even if there are changes in the workforce; and
- ▶ as evidence that certain activities have been performed and to provide additional data or information by which improvements can be assessed and made, e.g. monitoring records.

Documented information is also useful to ensure feedback.

ISO 45001 requires you to control and update your documented information so it is available and suitable for use, where and when needed.

Documented information storage can be whatever suits your organization and the task at hand, e.g. electronic spreadsheets, notes or apps on smart phones, photographs, traditional log-books, work instructions, and online instruction videos. In most cases, it is likely to be a mixture of these things.

You should not generate unnecessary paperwork. Create and keep just enough documented information to ensure the OH&S management system is effective and that it will meet all legal requirements and other requirements.

Implementation approaches

Where there is a requirement in ISO 45001 to maintain documented information, it means you must keep it up-to-date, e.g. purchase specifications, procedures, emergency plans, instructions, laws, regulations, and list of hazards.

A requirement in ISO 45001 to retain documented information means that you must keep the information safe and unaltered in order to provide evidence of activities performed, e.g. incident investigation reports, health checks, management reviews or information required by law.

Documented information should be identified and described. This could mean giving something a title (e.g. “Site rules” on a poster), a reference number (e.g. “2019 06 10 Management meeting minutes”) or anything else that helps uniquely identify it (document control), so the correct piece of documented information can be found.

You need to ensure that your documented information is available for all relevant workers at all levels and functions, as well as any relevant external interested parties.

The same documented information can be presented in different formats for different users, but controls should be put in place to ensure it is used as intended, e.g. data cannot be changed without permission and confidentiality is maintained on sensitive information.

It is for each organization to decide the extent to which documented information is needed for the management system to be effective, but there is certain documented information that is required by ISO 45001:2018 if the organization is seeking conformity against its requirements. This is set out in the following table

Documented information relating to...	Relevant subclause
The scope (the boundaries and applicability of the management system)	4.3
The OH&S policy	5.2
Organizational roles, responsibilities and authorities	5.3
Risks and opportunities	6.1.1
The process(es) and actions needed to determine and address its risks and opportunities to the extent necessary to have confidence that they are carried out as planned	6.1.1 and 6.1.2–6.1.4
Methodology and criteria for assessing OH&S risks	6.1.2.2
Information to show applicable legal requirements and other requirements have been considered and evidence of the compliance evaluation results	6.1.3 and 9.1.2
OH&S objectives and plans to achieve them	6.2.1–6.2.2
Appropriate documented information as evidence of competence	7.2
Evidence of communication (as appropriate)	7.4.1
The process(es) and plans for responding to potential emergency situations	8.2
Evidence of: <ul style="list-style-type: none"> the results of monitoring, measurement and analysis of performance evaluation; and the maintenance, calibration or verification of measuring equipment 	9.1.1
Evidence of the results of compliance evaluation	9.1.2
Evidence of the implementation of the internal audit programme and audit results	9.2.2

Documented information relating to...	Relevant subclause
Evidence of the results of management reviews	9.3
Evidence of: <ul style="list-style-type: none">• the nature of incidents or nonconformities and any subsequent actions taken; and• results of any action and corrective action, including effectiveness	10.2
Information as evidence of continual improvement	10.3

When creating documented information, you should consider how people will access and understand the information, for example:

- ▶ the languages spoken by workers in the organization and if translation into other languages is needed;
- ▶ software versions;
- ▶ ensuring it is compatible with smartphones or tablet computers; and
- ▶ accessibility for those with a disability, e.g. audio versions of text may not be appropriate for people with a hearing impairment.

8. Operation

8.1 Operational planning and control

8.1.1 General

What is it and why is it important?

Operational planning and control of processes is about making decisions to meet the requirements of the OH&S management system, including control of OH&S risks and implementing actions to improve the OH&S management system.

This is important to provide healthy and safe workplaces, prevent work-related injury and ill health, continually improve your OH&S performance, and to comply with legal requirements and other requirements regarding OH&S in your organization.

Implementation approaches

You need to plan, implement, control and maintain these processes by eliminating hazards and, where this is not possible, reducing the OH&S risk to an acceptable level, according to the priority set out in the hierarchy of control (see 8.1.2).

You also need to establish criteria to understand if the processes are working as designed. The performance of the process is assessed when you conduct the internal audits specified in 9.2. You need to be aware of other organizations with

which you share the workplace and consider their risks as well as your own and adapt the OH&S measures accordingly.

You do this by using the knowledge gained from Clauses 4 and 6 to develop and implement:

- ▶ processes with identified performance criteria to manage your risks and opportunities within the defined scope of the OH&S management system, including hazards and OH&S risks; and
- ▶ actions determined in 6.2 to achieve OH&S objectives.

Examples of operational controls include:

- ▶ measures to stop using hazardous material;
- ▶ procedures, work instructions and safe systems of work;
- ▶ competency requirements of workers at all levels, including managers and supervisors, involved in the process;
- ▶ preventive maintenance programmes;
- ▶ specifications for the procurement of products and services;
- ▶ requirements for contractors and other visitors to the workplace; and
- ▶ application of engineering and administrative controls, including the use of safety signs.

8.1.2 Eliminating hazards and reducing OH&S risks

What is it and why is it important?

Eliminating hazards and reducing the OH&S risks involves a decision-making process using a systematic approach referred to as a “hierarchy of controls”. A description of the concepts, as applied to managing OH&S risks, is provided below. You need to consider elimination and reduction in the following order of priority:

- ▶ elimination;
- ▶ substitution;
- ▶ engineering controls and reorganization of work;
- ▶ administrative control; and
- ▶ personal protective equipment.

Control methods at the top of the hierarchy are potentially more effective and protective than those at the bottom. Following this hierarchy normally leads to the implementation of inherently safer systems, where the risk of ill health or injury is substantially reduced. It is important to understand that many OH&S risks can require more than one control to be used. It is common for several types of controls to be used at one time.

Implementation approaches

Elimination, where the main aim is to eliminate OH&S hazards

This is the most extreme and ultimately effective form of prevention strategy (total removal of the risk). This can be done by eliminating a task that is creating the hazard, such as carrying out work on the ground to avoid working at a height or prohibiting the use of hazardous material such as banning the use of asbestos material in construction. Another example is if a worker must mix two types of chemicals to get the preferred product and this poses a high risk, it would be better to eliminate this process by getting premixed product. Another example is removing fork-lift trucks from a work area.

If you cannot eliminate OH&S hazards, you should consider the next step in the hierarchy of control, which is substitution.

Substitution, where the main aim is to replace the source of the hazard with one that is less hazardous

This involves substitution of an existing hazardous process or the use of a hazardous substance by a less hazardous process or substance, e.g. replacement of the use of solvent-based paints with water-based paints; changing slippery floor material for one that is not slippery, and; lowering voltage requirements for equipment. If you cannot use substitution, you should consider the next step, which is engineering controls and reorganization of work.

Engineering controls and reorganization of work, where the main aim is to isolate the workers from the hazards or planning the work in a different manner

Engineering control solutions include installing guarding at machinery blades to avoid contact between the sharp cutter and workers, or using a conveyor to move objects instead of manually lifting them.

Reorganization of work involves planning and reorganizing work to avoid workers working in hazardous situations, such as arrangements related to working time, workload and intensity, or reorganizing work to avoid people working alone.

If you cannot isolate the workers from the OH&S hazards, or reorganize the work to avoid the hazards, you should consider the next step, which is administrative control. Often you can use administrative controls in combination with other controls, for instance, adding signage to ensure the use of an engineering control such as using a guard, or an emergency power off switch in a known point where a worker can be harmed by a machine.

Administrative controls, where the main aim is to provide training, instruction, information and supervision in processes to reduce risk by increasing the competence and awareness of workers

This involves the use of administrative methods such as procedures, work instructions, safety signage and warnings, such as alarms, to reduce risk. Administrative controls do not remove or address hazards and OH&S risks directly, but instead control the way people work, to limit impacts.

In addition to all the above controls, you should consider the use of personal protective equipment (PPE). This is the least preferred control in the hierarchy.

Personal protective equipment, where the main aim is to provide a physical barrier between the worker and the hazard

PPE is generally used as a last resort, when other methods have failed, or as an interim situation while other methods are being implemented, or in combination with other control methods. It relies on :

- the correct selection, fit, training and maintenance of PPE ;
- workers wearing PPE all the time when they are at risk of injury and ill health ; and
- effective supervision to ensure it is worn correctly.

8.1.3 Management of change

What is it and why is it important ?

The management of change involves processes that manage changes in your organization either to its OH&S management system or to its activities.

It is important to establish process(es) for the implementation and control of planned changes so that the introduction of new products, processes, services or work practices do not bring with them any new and unmanaged hazards or unintended consequences. Changes should be evaluated through ongoing hazard identification and risk assessment.

Implementation approaches

You need to consider hazards and potential risks associated with new processes or operations at the design stage, as well as when there are changes in the organization or to existing operations, products, services or suppliers. The following are examples of conditions that should initiate a management of change process :

- new or modified technology (e.g. automation) ;
- new equipment, facilities or work environment ;
- new or revised processes, work practices, design specification or standards ;

- ▶ changes to organizational goals and objectives including new products and services;
- ▶ different types or grades of raw materials;
- ▶ significant changes to the organizational structure and workforce, including the use of contractors;
- ▶ modifications of health and safety equipment or controls; and
- ▶ a new and different activity taking place near the organization's workplace.

Depending on the nature of the change and the circumstances, the assessment of OH&S risk can vary in depth and detail. You can take temporary measures in certain circumstances, but this should always be confirmed by a full assessment. You need to review the appropriateness of controls when activities and processes are undergoing change. Control needs to be maintained while planned changes are put in place, making modifications to how you operate and the controls needed. For example, if equipment is being replaced, then there can be a period of time when engineered controls, such as guarding, are not operational. During this period, you need to add new controls to prevent or mitigate unintended consequences such as operating the machinery without guards in place.

The management of change process can include consideration of the following questions to ensure that any new or changed risks are acceptable. You can ask questions such as:

- ▶ have new hazards been introduced?
- ▶ what are the risks associated with the new hazards?
- ▶ have the risks from other hazards changed?
- ▶ could the changes adversely affect existing risk controls?
- ▶ how are workers affected by the proposed change? (this can include changes to work conditions, hours of work, psychosocial risks, competences)
- ▶ have the most appropriate controls been chosen, bearing in mind usability, acceptability and both the immediate and long-term costs?

You can also consider:

- ▶ developing methods to assess OH&S risk and OH&S opportunities related to the changes so that you do not introduce new unforeseen hazards or increase existing OH&S risks;
- ▶ determining the resources needed to implement the changes;
- ▶ communicating the decision to implement changes to all affected workers;
- ▶ providing training to all affected workers;
- ▶ including the need to manage changes in your operational planning; and
- ▶ retaining and maintaining documented information on the implementation of changes.

8.1.4 Procurement

What is it and why is it important?

Procurement is the process of acquiring products and services, including through outsourcing. It involves the process of selecting external providers such as contractors and vendors, establishing payment terms, the negotiation of contracts, and actual purchasing of products and services. Purchasing is a subset of procurement. It is important that any materials (e.g. chemicals), products (e.g. equipment) and services purchased or obtained through other means (e.g. free samples) do not compromise OH&S at your workplace.

Implementation approaches

You cannot rely on the reputation of your external providers to determine whether their products and services meet your organization's OH&S requirements. When deciding controls for external providers, you need to have a clear understanding of the degree of OH&S control that is necessary, as well as recognizing when limitations dictate that you have little or no influence.

You should develop OH&S measures that are relevant to your organization's procurement process. You can do this by developing processes to manage health and

safety requirements during the procurement activities. You should communicate your organization's OH&S requirements to these external providers.

You can take actions such as:

- ▶ ask for information from your suppliers regarding the risks associated with processes, products, technologies or services that you are planning to purchase;
- ▶ during the selection process, request information from any potential external provider on how they will manage their OH&S risks;
- ▶ establish and maintain an OH&S programme for external providers including potential contractors, vendors and suppliers involved in your business;
- ▶ establish processes to exchange information about hazards present in the workplace and the measures that have been implemented to eliminate or control such hazards; and
- ▶ consider OH&S requirements in all business decisions related to procurement, including contractor and vendor selection, purchasing, facility design and modification.

8.1.4.1 Contractors

What is it and why is it important?

A contractor is a person or organization who provides a service but who is not an employee of your company. If you hire contractors, how effectively they do – or do not – observe OH&S and contractual requirements can impact your organization's OH&S performance, ability to meet legal requirements and other requirements, and your reputation. Contractors can bring in hazardous materials, operate equipment, access facilities and interact with workers. Unless they are aware of your OH&S requirements and meet them, they can pose a risk to your organization, workers and other interested parties.

Implementation approaches

You must have arrangements in place to clearly communicate your OH&S requirements to contractors. These arrangements must be appropriate to the hazards

and OH&S risks associated with the work to be performed. In addition to this, it can be useful to communicate the consequences associated with nonconformity to OH&S requirements.

You need to:

- ▶ establish OH&S criteria for the selection of contractors, e.g. specification of competency and/or training requirements for workers acting on behalf of the contractor;
- ▶ communicate your OH&S requirements to contractors, including processes to exchange information about hazards and measures to control them; and
- ▶ develop processes on evaluation, monitoring and periodic re-evaluation of the OH&S performance of contractors (including work performed at the contractor's site).

When consulting with contractors on changes that can affect OH&S, you need to take account of the following:

- ▶ new or unfamiliar hazards (including those introduced by the contractor);
- ▶ risks and their impact on workers and other interested parties;
- ▶ reorganization;
- ▶ new or amended controls;
- ▶ changes in materials, equipment, exposures, etc.;
- ▶ changes in emergency arrangements; and
- ▶ changes in legal requirements and other requirements.

You should also consider the following:

- ▶ OH&S requirements for the job ahead of the appointment of contractors;
- ▶ outlining OH&S requirements in contracts or agreements with contractors;
- ▶ requesting and reviewing work instructions used by contractors for acceptability;
- ▶ supervising the onsite work performed by contractors; and
- ▶ establishing processes of coordination of activities and OH&S with contractors.

8.1.4.2 Outsourcing

What is it and why is it important?

Outsourced processes are arrangements where an external organization performs part, or all, of an organization's function or process. It is important that you manage outsourcing functions and processes that have a potential impact on the health and safety of your workers and workplaces. For instance, ensuring that, on multi-employer work sites, shortcuts are not taken and poor housekeeping does not exist, as well as in situations where your legal responsibilities as employers are more ambiguous.

As with externally provided services, you may choose to outsource because you lack the equipment, capability and competence or you do not wish to do it within the organization. Whatever the reason for outsourcing, you should keep some degree of control (inspections, audits, review of records, etc.) and be able to rely on how the external organization controls OH&S risks related to the outsourced process. The external organization is outside the scope of your OH&S management system, but the outsourced function or process is still within the scope and must be taken into consideration.

Implementation approaches

Even though you are likely to have limited control or no influence on the provider of the outsourced process, there could be cases where you still retain liability for conforming to requirements. This is largely dependent on the degree of OH&S risk associated with the outsourced function or process. This can also be dependent on whether the activity occurs within your workplace or outside your workplace. For example, there can be an impact if delivered equipment or materials do not meet your health and safety requirements, or the potential risks can be related to how they are packaged or delivered to your organization.

You have a responsibility to exercise due diligence to ensure that outsourced functions or processes are meeting your OH&S requirements.

You need to communicate your OH&S requirements for the outsourced function or process. You can request documentation such as work instructions, method statements, records or audit results from the external organization so that it can demonstrate that it meets your requirements. The type and extent of control applied to outsourced functions or processes should be defined within your OH&S management system.

For your outsourced functions or processes, you should:

- ▶ understand the boundaries of your OH&S responsibilities and authorities;
- ▶ determine your OH&S expectations and requirements;
- ▶ develop criteria for evaluating OH&S performance;
- ▶ develop audit activities; and
- ▶ retain and maintain documented information relating to actions taken to managing OH&S issues in outsourcing.

8.2 Emergency preparedness and response

What is it and why is it important?

Once you have determined potential emergency situations relevant to your activities, processes and products, you should develop plans to manage these situations. Emergency management is important to minimize adverse impacts on OH&S performance. In addition, the effects of an emergency can be expensive and damaging to your organization due to downtime, property loss, injuries, ill

health or environmental clean-up costs. Lack of preparation for, or poor response to, emergency events can also erode confidence and damage your reputation.

Some examples of emergency situations are:

- ▶ natural incidents, such as tornados, floods, earthquakes, lightning strikes or hurricanes;
- ▶ acts of violence involving customers, workers, protestors or terrorists;
- ▶ spills or emissions of hazardous materials such as liquids or gases;
- ▶ fires, explosions or building collapses; and
- ▶ medical incidents such as injuries, heart attacks or other illnesses.

Implementation approaches

In an organization, emergency situations can originate internally or externally. Waiting until the emergency occurs puts you in a reactive mode, which is often inefficient and ineffective. However, if you anticipate and plan for reasonably foreseeable emergency situations, you are taking a proactive stance to prepare in case something does happen and taking action to prevent emergency situations, where practical.

What is most important when an emergency occurs is engaging the right experts. Therefore, it is necessary to compile emergency numbers for notifying emergency responders, hospitals and regulators as appropriate. Assign responsibility to key workers in your organization to assist the emergency responders in their efforts to respond to incidents.

Most organizations have an emergency plan to protect the health and safety of workers and prevent property loss. Typically, at a minimum, this addresses what to do in the case of fire and includes an evacuation plan and periodic fire drills. This is a good starting point for managing emergency situations that can have OH&S impacts.

When preparing for emergencies, you can apply the hierarchy of controls (see 8.1.2). You should eliminate the hazard whenever possible.

For example:

- ▶ construction techniques and materials that withstand weather-related incidents such as hurricanes and earthquakes;
- ▶ designing service areas to remove the possibility of physical contact with potentially violent customers;
- ▶ investing in appropriate containers and maintenance to prevent leaks or spills of hazardous materials;
- ▶ proper storage of combustible and flammable materials to prevent fires;
- ▶ proper storage of potentially hazardous materials to prevent unintended exposure to workers; and
- ▶ proper first aid training and equipment available on site to respond to medical emergencies.

You need to decide the response actions in which your workers need to participate. If there is a fire, for example, are the workers expected to operate a fire extinguisher and extinguish the fire, or notify the emergency responders and evacuate? The training and competency of your workers needs to be aligned with the response actions expected. Particular attention should be given to conducting exercises and testing to ensure that planned activities are achievable and realistic and that the expected contribution of the external services is effective.

You need to coordinate emergency response plans with external organizations that provide services or perform functions in the workplace. Evacuation routes need to be planned, clearly marked and free of obstructions. Local officials and fire brigades also need to prepare for emergency responses. As such, they often welcome opportunities to tour buildings and participate in drills in your workplace.

9. Performance evaluation

9.1 Monitoring, measurement, analysis and performance evaluation

9.1.1 General

What is it and why is it important?

Monitoring, measurement, analysis and evaluation is about collecting reliable data on the performance of the OH&S management system and using the data to understand if your system is delivering its intended outcomes or if changes are needed.

There is a subtle but important difference between monitoring and measurement. Monitoring is generally an observation or check on the status of a system, a process or an activity. Measurement is an activity performed to collect data. This can be quantitative or qualitative. Analysis is the evaluation of data collected from monitoring and measurement activities to evaluate OH&S performance.

Implementation approaches

The challenge for you is to identify what are the key contributors to achieving the intended outcomes of your management system. Once identified, you should consider how you can monitor and measure your activities and results, at the

same time asking yourself how you will analyse, evaluate and follow up on the data you get.

You should make sure that the OH&S monitoring and measurement equipment (e.g. sampling pumps, noise meters, and toxic-gas detection-equipment) and methods are fit for purpose and provide you with reliable information.

Decide what you need to monitor or measure, when this will be done, who will do it and if you need any additional equipment or other resources. Then start collecting and analysing this data, comparing the results to find out if you are achieving your objectives, fulfilling your requirements and managing your hazards, risks and opportunities.

Keep in mind that the data collected can require a level of analytical thinking in order to provide useful information on performance. This can be a simple method of comparison against something like an exposure standard or, if collecting many samples or data points, statistical analysis. You need to determine appropriate methods to produce valid and useful findings. Measuring and monitoring can be either reactive or proactive and you should do both to enhance your performance.

Examples of what you can proactively monitor or measure are:

- ▶ top management commitment;
- ▶ exposure to hazardous workplace conditions and agents (e.g. noise, hazardous substances);
- ▶ implementation of corrective action related to hazards and OH&S risks;
- ▶ potential issues with legal requirements and other requirements;
- ▶ effectiveness of OH&S training;
- ▶ OH&S behaviour-based observations;
- ▶ results of internal and external audits;
- ▶ results of legally required and other inspections;
- ▶ worker consultation and participation;
- ▶ benchmarking against agreed good OH&S practices;
- ▶ work activity assessments (e.g. job hazard analysis);
- ▶ safety inspections and the number of identified issues;
- ▶ results of workplace safety tours or inspections; and
- ▶ perception surveys to evaluate OH&S culture and related worker satisfaction.

Examples of what you can reactively monitor or measure are:

- ▶ occurrences and rates of incidents;
- ▶ lost-time incident rates, lost-time ill health rates;
- ▶ progress on your policy commitments and objectives;
- ▶ effectiveness of operational controls;
- ▶ monitoring of ill health;
- ▶ actions following receipt of feedback from interested parties; and
- ▶ health screenings.

9.1.2 Evaluation of compliance

What is it and why is it important?

You need to know whether your organization complies with your legal requirements and other requirements. Many organizations operate without knowing they are in violation of a legal requirement or other requirement. ISO 45001:2018 does not replace legal requirements (which always take precedence) and users are expected to meet the legal requirements that apply in their country as a baseline condition and expectation for minimum OH&S performance.

Implementation approaches

Develop a list of legal requirements and other requirements. Go through the list and check if you comply with each requirement. Ensure inspections of your workplace are included. You may have already created this list during your planning activities when you documented your legal requirements and other requirements (see 6.1.3). Decide what to do if you find anything out of compliance.

To get information about your degree of compliance, you can choose to ask competent advisors or key workers in an OH&S organization to go through your operations with the aim of evaluating compliance. You can also review reports from both internal and external audits and from labour inspections. There might also be reports on noncompliance from workers or other interested parties.

9.2 Internal audit

What is it and why is it important?

An internal audit provides evidence that operations and your OH&S management system are properly implemented and maintained and deliver the intended outcomes, including meeting the organization's own requirements, and then the requirements of ISO 45001:2018. It helps to identify opportunities for improvement of both OH&S performance and the OH&S management system.

Implementation approaches

Decide who will do the audit, what will be audited, when the audit will take place, who needs to be involved and how audits will be conducted. Remember to audit not only normal operations, but also new processes and non-standard work operations, such as start-up, maintenance and shutdown.

Auditors must be competent in their understanding of ISO 45001:2018 and the methods for evaluating management systems and the required processes. You should select auditors who are familiar with key OH&S elements, such as hazard identification, OH&S risk assessment, operational controls and emergency preparedness. Auditors can be workers within your organization. It is important to establish methods to ensure that the objectivity of the auditor is maintained. You can accomplish this by defining their role so that their own departments, activities or processes are audited by someone else. Participation of workers in the audit process can also help to ensure objectivity and to support engagement and positive outcomes. In very small organizations, where there are not enough workers to distance the auditor from what is being audited, every effort should be made to remove bias and encourage objectivity. Consider the need to train your auditors to develop and maintain their competence. This can be achieved by external skilled organizations if you do not have the knowledge internally.

To initiate a more systematic audit process, you should consider if you want to cover all your activities and all standard requirements in one audit or in several audits, how much time you will need for the audits, if the audits will be performed in one session or split up over multiple sessions, and how frequently you want internal audits. Factors to consider include the available resources, size and complexity of your organization and the scope of your OH&S management system.

Before conducting your audits, it is good practice to communicate how the audit will be performed and who needs to be involved. The audit typically starts with an opening meeting where the auditor explains what the audit will cover and the way the audit will be performed (this includes, for example, interviews, and reviewing activities and documented information).

During the audit, identify processes that need to be improved, as well as identifying positive aspects. Put these findings in a report and communicate the report to top management and others who need to be involved. Typically, a closing meeting occurs where the auditor explains the results, followed by discussion and clarifications. Following this stage, decide what action is needed to deal with the findings.

9.3 Management review

What is it and why is it important?

A management review is an opportunity for top management to check how the organization's OH&S performance and if the OH&S management system is working. Management reviews should take place at planned intervals – not only to see if action needs to be taken with regard to the OH&S management system, but also to help demonstrate leadership and commitment to OH&S performance.

Implementation approaches

The goal for your management review is to make decisions on a way forward, based on how well your OH&S management system is currently performing and how anticipated changes can affect your performance in the future. A management review can result in decisions about setting new OH&S objectives or additional actions if your current objectives have not been met. This might include increasing the effectiveness of your operational controls, and locating additional resources and competence to enhance your performance.

Prepare the review by analysing the data that have been collected since the last review. This can be time-consuming and you should reserve enough time to do this properly. Sources of information include the results of monitoring and measuring, the outcome of any actions taken since the last review and any recommendations from internal and external audits. Special attention should also be given to context change, along with any relevant information from interested parties and changes in legal requirements and other requirements. Note that subclause 9.3 of ISO 45001:2018 identifies specific inputs and outputs for the management review process. You should ensure that the activity includes all the inputs that are relevant to your organization and that the outputs are met.

10. Improvement

10.1 General

This is a general clause leading from the outputs of Clauses 8 and 9 (operational controls, monitoring, measuring, auditing and management reviews) to provide sources for determining improvement opportunities. Guidance on nonconformity and incidents are provided separately below. The process requirements for nonconformity and incidents are similar, and it is up to the organization to determine if they have one common process or separate ones based on the context of their activities.

10.2 Incident, nonconformity and corrective action

10.2.1 Nonconformity

What is it and why is it important?

A “nonconformity” happens if an ISO 45001:2018 requirement is not met or when your own OH&S management system performance requirements are not met. No OH&S management system is perfect, so you will almost certainly find some nonconformities, problems, deviations and inconsistencies in your organization.

Examples include: machines not functioning properly (increasing hazards and OH&S risks for the operators), processes or procedures not being followed, contractors not following OH&S management system contract requirements, fire drills not being conducted according to defined steps, or audit results indicating OH&S management system requirements not being met. It is important to have a systematic method for identifying the cause of these findings and taking action to correct and prevent their recurrence.

Implementation approaches

You need to:

- ▶ identify and correct nonconformities;
- ▶ act to mitigate any OH&S management system risks;
- ▶ analyse the cause(s), i.e. root causes and contributing factors; and
- ▶ determine the need for corrective actions to eliminate the cause(s) and to prevent recurrence.

When you analyse a nonconformity, an obvious cause can often be identified. It is important to look beyond the obvious, however, to determine the underlying reason. It is important to identify the root cause(s) to prevent repeat incidents. Involving those directly responsible for the activities, processes and operations where the problem occurred can help identify failures responsible for causing the incident or nonconformity. For example:

- ▶ was there a maintenance problem or one associated with the design of the process or activities?
- ▶ what conditions contributed to the nonconformity (e.g. instructions not available at point of use or reduced numbers of workers during a night shift)?
- ▶ do processes cover routine, non-routine and emergency situations?
- ▶ was training material lacking?
- ▶ is language a barrier in training?

Keep in mind that there can be multiple causes that need to be addressed to prevent a nonconformity from recurring. Implementing effective corrective actions

is very important. You must ensure that roles, responsibilities and authorities are assigned and that the corrective actions are taken in a timely fashion. If substantial changes are made, a formal briefing can be helpful to explain what the changes are and why they are needed. This provides an opportunity for the changes to be fully discussed with workers.

Give yourself time to prepare and analyse performance and consider how to present key information. You can:

- ▶ look at trends in nonconformities so that future problems can be prevented;
- ▶ determine whether similar nonconformities have occurred or can occur elsewhere in your organization; and
- ▶ share information on nonconformities and lessons learned during worker meetings and by incorporating the information into training materials.

10.2.2 Incidents

What is it and why is it important?

An incident can directly result in ill health or injury or it can be a “near miss”, where ill health or injury could have occurred, but on this occasion did not. Both types of incidents are important because they affect OH&S performance and the provision of a healthy and safe workplace. The purpose of analysis and investigation is to ensure these occurrences do not happen again.

It is essential to investigate the root causes of incidents. Incidents have layers of cause:

- ▶ unsafe actions or conditions are only immediate causes;
- ▶ these immediate causes often have underlying basic causes; and
- ▶ basic causes are usually due to poor management of the controls put in place to address risks – or controls that are inadequate or absent.

The purpose of investigations is to identify practices that could have prevented the incident, or that were either ineffective or absent at the time. For example, when a machine without protective guards causes injury to the operator, the absence of

the guard is the cause of the injury, but not of the incident. In this case, the cause of the incident is *why* the machine was unprotected. This could be because of poor maintenance, pressure on production, operator failure (and there will also be an underlying reason for this), a poorly designed machine or an ineffective process (such as if the guard prevented completion of the work).

Implementation approaches

You need to establish methods for reporting, evaluating and investigating incidents. The main purpose of investigating incidents is to prevent them from happening again by identifying and eliminating the cause(s) at source. It is important to focus on process and other root causes and not just blame incidents on human error – there is almost always a deeper cause.

Establish an incident investigation process that includes participation of workers and other relevant interested parties, defines roles, responsibilities and authorities, and describes how you will:

- ▶ analyse and investigate incidents;
- ▶ act to minimize the consequences of incidents;
- ▶ define the beginning and conclusion of corrective and preventive actions; and
- ▶ demonstrate the effectiveness of corrective and preventive actions.

When analysing and investigating incidents, you need to collect key pieces of information to understand why they happened.

Additional information you collect during the investigation can also help in determining corrective actions. Take into account:

- ▶ **how often**: the frequency of incidents and if there is a pattern;
- ▶ **where**: the location of the incident, activity involved, type and location of the injury;
- ▶ **when**: the season, day of the week, hour;
- ▶ **who**: the workers and other interested parties affected by or involved in the incident, including their responsibilities and authorities and their level of seniority;

- ▶ **what**: the severity of the incident, type and extent of injury or ill health, property damage; and
- ▶ **why**: the direct, indirect and root causes.

Using this, and other relevant information about the incident, you can then determine the action(s) required to minimize the consequences (recurring and residual risks) and the lessons learned, as well as the application of the corrective actions to avoid the risks and, if not possible, to minimize or control them.

The outcome of incident analysis and taking corrective actions can be viewed as a reactive approach. Prevention, through planning, hazard identification and effectively managing risks, should always be the primary aim.

10.3 Continual improvement

What is it and why is it important?

Effective OH&S practice is rooted in the management of risks that can impact the health and safety of your workers. Continual improvement is essential to ensure you achieve the intended outcome of your OH&S management system. You should always seek to improve your organization's performance and keep documented information that shows what you are doing to achieve this. This includes identifying problems, including incidents and the implementation of effective corrective actions, in order to prevent recurrence or occurrence of other types of problems (see 10.1 and 10.2). Improvement, however, is more than looking at past incidents. It is also looking at potential risks and proactively searching for improvement opportunities, such as increasing worker awareness of situations that could be unsafe and adding controls to prevent harm.

Implementation approaches

Improvements can often be made by very simple changes in the way work is carried out, as well as by planning more complex or long-term changes. In any case, you need to establish documented improvement objectives and action plans on how you achieve them (see 6.2). Documentation can be via e-mail for simple changes or perhaps by using a formal written or electronic plan for more complex situations. Improvements in OH&S performance can be made by taking into account information from sources such as:

- ▶ frequent reviewing of hazard identification and assessment of OH&S risks, OH&S opportunities, other risks and other opportunities;
- ▶ sharing best practice (by joining professional bodies or attending networking events);
- ▶ learning from incidents and issues in your organization and other organizations;
- ▶ inputs from worker consultation and participation;
- ▶ benchmarking or comparing practices internally or with other organizations;
- ▶ input from other interested parties;
- ▶ changes in internal and external issues affecting OH&S performance;
- ▶ results from performance monitoring, analysis and evaluation; and
- ▶ management reviews.

Improvements can include:

- ▶ improving organizational and individual knowledge;
- ▶ changing the way something is done (e.g. making sure more than one person checks safety measures are in place before an activity takes place); and
- ▶ improving your database system or methods for analysing data such as incident reports.

It can be helpful to stand back occasionally from day-to-day operations and look at your organization from every angle. You need to understand the big picture and cross-check the interventions you have made. Monitor the context affecting OH&S in your organization, including the needs and expectations of interested

parties. Ask questions and review findings and sources of evidence related to your OH&S performance. Most importantly, make sure you involve your workers through consultation on how work can be improved. Sometimes they can provide simple suggestions and solutions that are effective in producing a healthier, safer, more productive workplace.

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Work-related injuries, illnesses or fatalities are always difficult for any kind of organization, but the negative effects for small businesses can be overwhelming. This handbook, published jointly by ISO and UNIDO, aims to help smaller economic units implement the requirements of ISO 45001:2018. Readers will get simple explanations and practical examples that support their first steps into the intricacies of workplace health and safety.

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