

# Workplace analysis

## How to identify hazards in your workplace

A workplace analysis is an assessment of your operations, procedures, processes, physical environment and individual workstations. Conducting a workplace analysis will help you identify hazards and risks, and will help you recommend and implement control methods.

The benefits of conducting an analysis include:

- Preventing accidents and incidents that might cause employee injury or property damage.
- Creating and maintaining a safe environment in which to work.
- Identifying and eliminating or controlling hazards in a timely manner.
- Instilling a sense of safety conscientiousness and safety culture in your workplace.

Start your analysis by following these steps.

1. **Review previous injury records.** Look for trends in injuries. You may recognize a trend in:
  - Types of injuries.
  - Time of year or specific season.
  - Specific shift or work area.
  - Specific job tasks.
  - Tools or equipment used or not used.

When conducting your analysis, pay attention to trends and look for related hazards.

2. **Use the attached checklist yourself or give it to supervisors as a tool for walk-throughs.** To help identify hazards, you can use the attached “*Supervisor workplace checklist*” to be sure you are covering all your bases. The checklist walks you through questions to ask yourself about the workplace and workstations. Review your answers. You may recognize trends you didn’t pick up on from previous loss records.

Pay close attention to feedback from your employees whether formal or informal. Ask for suggestions. Employees do the job every day and might know of an easy, inexpensive fix to a serious workplace problem.

The information from the checklist and your employees will give you additional insight into the hazards and risks in your workplace.

3. **Walk through the worksite. Look for hazards.** Now that you have identified trends in previous accidents, it is important to evaluate specific jobs, workstations, equipment, the environment and your employees’ behaviors.

### **Jobs.**

You know how important it is to closely observe jobs where accidents occur frequently or where they occur infrequently but result in disabling injuries. Pay close attention to:

- *New jobs.* Lack of experience in these jobs may cause hazards that are not evident.
- *Modified jobs.* New hazards may be associated with changes in job procedures.
- *Infrequently performed jobs.* Workers may be at greater risk when doing non-routine jobs.

### **Workstations.**

Workstations will be different for different industries. For example, in an office environment, a workstation will include the employee’s desk, computer, phone and chair. In a manufacturing facility, a workstation may include a large dye-cutting machine, a stool or an anti-fatigue mat. These differences will pose different hazards. Consider the:

- *Physical issues:* furniture, equipment, heights, reaches, mobility and lighting.
- *Usability and comfort:* function of the work-

station. Is it user-friendly?

- *Work organization*: flow of work, stress levels and good work/rest schedules.

Specific risk factors to watch for in all industries include:

- *Posture*: not having a neutral posture in the back, neck, shoulders and wrists.
- *Force*: direct pressure on the palm of the hand or the knees or constant grip of a tool.
- *Repetition*: a repeat of the same motion time after time to complete a task.

Workstation evaluations are all about fitting the equipment to the user. Be aware that these evaluations may need to be done by professionals trained in ergonomics and body mechanics. For assistance from one of SFM's ergonomics professionals, call (800) 937-1181.

#### **Equipment.**

The equipment your employees are using should be the right size, weight, capacity and design. It should also be well maintained.

Make sure that handles are not damaged, guards are not missing and personal protective equipment is being used properly.

#### **Environment.**

Watch for conditions that can be hazardous to all employees. Conditions like a wet, dirty or uneven floor, poor lighting or extreme temperatures can all affect the way an employee performs his or her job and may result in an accident or injury.

#### **Employee behaviors.**

Because many injuries are a result of employee misjudgment, it is crucial that you and your organization's supervisors pay close attention to your employees' behaviors and work methods. If employees are not trained on the safe way to perform a task, they may be unaware of the hazards involved.

You'll also want to be aware of employees' symptoms. Notice behaviors such as personal adaptations to workstations, frequent changing of position or increased complaints or absenteeism. These may be signs that an employee is injured but is not reporting it.

#### **4. Determine ways to eliminate or control the hazards.** Identifying hazards is half the battle. All of the information you gathered so far will help you eliminate your workplace hazards.

Here are some suggested control methods. Of course, some will work for your organization and others will not. Try solutions that make sense for your business.

##### **Eliminate hazards by:**

- Choosing a different process.
- Modifying an existing process.
- Substituting with less hazardous substance.
- Improving the environment or workstation.
- Modifying or changing equipment or tools.

**Contain the hazard.** If it cannot be eliminated, contact might be prevented by using enclosures, machine guards, personal protective equipment or similar devices.

**Revise work procedures.** Consider modifying steps which are hazardous, changing the sequence of steps, or adding additional steps.

**Reduce the exposure.** Consider reducing the number of times the hazard is encountered. An example would be modifying machinery so that less maintenance is necessary.

For questions about analyzing your workplace, call your SFM Loss Prevention representative at (952) 838-4200 or (800) 937-1181.

# Supervisor workplace checklist

Use this checklist to identify the hazards and risks in your workplace.

<b>Material handling</b>	Yes	No
Are heavy materials or equipment over 20 pounds being handled on site? If yes, what are they?	<input type="checkbox"/>	<input type="checkbox"/>
Do workers have to lift more than 20 pounds often? If yes, how can this be prevented?	<input type="checkbox"/>	<input type="checkbox"/>
Do any workers have to lift more than 50 pounds at one time without help?	<input type="checkbox"/>	<input type="checkbox"/>
Are there handles for materials that must be carried? If yes, are the handles easy to use and comfortable?	<input type="checkbox"/>	<input type="checkbox"/>
Are workers encouraged to get help from a co-worker to lift heavy materials?	<input type="checkbox"/>	<input type="checkbox"/>
Are there carts, dollies or other assisting devices readily available for moving materials? If yes, are these being used? If no, why not?	<input type="checkbox"/>	<input type="checkbox"/>
Are materials delivered as close as possible to where they will be used? If no, how could this be changed?	<input type="checkbox"/>	<input type="checkbox"/>
On what jobs do workers have to lift overhead? How could this lifting be avoided?		
Are materials stored at floor or ground level? If yes, do workers have to bend down to lift materials?	<input type="checkbox"/>	<input type="checkbox"/>
Could the materials be stored at waist height?	<input type="checkbox"/>	<input type="checkbox"/>
On which tasks do workers have to reach far to pick up or lift materials?	<input type="checkbox"/>	<input type="checkbox"/>
Could the materials be moved closer?	<input type="checkbox"/>	<input type="checkbox"/>

## Tools

Which tools are very heavy?		
Which tools vibrate too much?		
Which tools must be used while in a difficult position?		
Which tools have poor handle design?		
Do gloves ever make it hard to grip tools?	<input type="checkbox"/>	<input type="checkbox"/>
Are alternative tools available with a better design? If yes, what are they?	<input type="checkbox"/>	<input type="checkbox"/>

## Repetitive work

	Yes	No
Which jobs must do the same motion dozens of times an hour for more than 1 hour per day? What are the motions?		
Can the number of repetitions be reduced by job rotation or rest breaks?	<input type="checkbox"/>	<input type="checkbox"/>

## Awkward postures

Which jobs must work overhead more than 1 hour per day?		
Can scaffolds, platforms or other equipment reduce overhead postures?	<input type="checkbox"/>	<input type="checkbox"/>
Which jobs must work at floor level or on knees for more than 1 hour a day?		
Which jobs require workers to stay in one position for a long time?		
Can rotation or rest breaks be used to reduce time in awkward postures?	<input type="checkbox"/>	<input type="checkbox"/>

Yes No

Which jobs require a lot of twisting or turning?

Which jobs require a lot of bending?

How can the need for twisting or bending be reduced?

### Standing

What jobs require workers to stand all day, especially on concrete floors?

Can anti-fatigue matting be used?

Is it possible to use adjustable stools to allow workers to rest periodically?

### Surfaces for walking and working

Are working and walking surfaces clean and dry?

Are the surfaces unobstructed?

Are the surfaces even?

### Sitting

What jobs require sitting all day?

Are the seats well designed and comfortable?

In heavy equipment, do workers have to lean forward to see or do their work?

### Production pressure

Do any workers work piece rate?

Have supervisors or workers been under production pressures that could lead to shortcuts and injuries?

How could this problem be reduced?

More rest breaks?  More safety meetings?  A special safety rep on site?  Other

**Your next steps...** Now that you have completed the checklist, evaluate your results. Ask yourself questions like the ones below. Then, determine and implement solutions.

### Sample evaluation questions

1. Do workers feel free to report symptoms?
2. Have any workers been reporting muscle pain?  
If yes, which body parts:  
Back\_\_\_ Neck\_\_\_ Shoulder\_\_\_ Arm\_\_\_ Wrist\_\_\_ Knee\_\_\_
3. Which jobs have the most problems? What may be the main cause(s)?  
 Repetitive motion     Awkward postures     Static pressure     Employee error  
 Heavy lifting     Lack of training     Equipment damaged     Other:
4. Do workers often appear exhausted at the end of the day?

### Sample solutions

- Get training for me and other supervisors to recognize hazards and offer solutions.
- Provide safe lifting technique training to employees.
- Provide shorter, more frequent rest breaks.
- Purchase ergonomic equipment such as: chairs, mats, headsets or tool handles.
- Adjust height of working surfaces to reduce long reaches and awkward posture.
- Provide the right tools for the job and the right tool handle for the worker.