



UNIT-16

Safety Culture

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Understand the difference between a safety program and a safety culture
- ✓ Use resources to help you understand the regulations in your area
- ✓ Launch a safety committee
- ✓ Identify hazards and reduce them
- ✓ Apply hiring measures that can improve safety.
- ✓ Help your organization write, implement, and review a safety plan

Unit 16

Safety Culture

A Safety Culture

This course takes the approach that safety must be an integral part of your organization. Safety should not be viewed as a single program, a quick fix, or an overnight project. In order for your workplace to be truly safe, safety must be part of your organization's culture and value system.

How Does Safety Apply to Me?

When you think of the need for a safety culture, you probably think of high-risk environments like factories and construction sites. However, regardless of your organization's industry, you do need to be concerned about safety.

How might safety apply in these situations?

Situation	Safety Issues
Insurance office with four people, each in their own cubicle (equipped with computer and telephone)	
Animal rescue facility	
Medical transcriptionists that work from home	

Why is health and safety training important?

Over 200 people are killed each year in accidents at work and over one million people are injured. Over two million suffer illnesses caused by, or made worse by, their work. But did you know that forestry is one of the most dangerous industries, and workers are 6 times more likely to be killed at work than a construction worker? That is not good odds. So, preventing accidents and ill health caused by work should be a key priority for everyone at work. As the owner or manager of a forestry contracting business you know that competent employees are valuable. Your business probably depends on them. Providing health & safety information and training helps you to:

- Ñ Ensure you or your employees are not injured or made ill by the work they do;
- Ñ Develop a positive health & safety culture, where safe & healthy working becomes second nature to everyone;
- Ñ Find out how you could manage health and safety better;
- Ñ Meet your legal duty to protect the health & safety of your employees.

(source <http://www.hse.gov.uk>)

Governing Bodies and Resources

Gathering Resources

Understanding who governs safety in your area is crucial to developing a comprehensive program. Note that although these resources refer to general federal programs, individual regions often have their own regulations. You will want to review the appropriate regulations thoroughly and regularly.

Governing Agencies

Here is a brief list of some governing agencies.

Area	Organization(s)	Website
Great Britain	Health and Safety Executive	http://www.hse.gov.uk/
United States of America	Occupational Safety and Health Administration (OSHA)	http://www.osha.gov
Canada	Canadian Center for Occupational Health and Safety	http://www.ccohs.ca
Mexico	Secretaría del Trabajo y Previsión Social	http://www.stps.gob.mx
European Union	European Agency for Safety and Health at Work	http://osha.europa.eu/
Asia	Asia Pacific Occupational Safety and Health Organization	http://www.aposho.org/index.jsp

Other Resources

Here is a list of additional workplace safety resources that may be useful.

Organization(s)	Area	Website
CanOSH	Canada	http://www.canoshweb.org
Centers for Disease Control and Prevention	United States	http://www.cdc.gov
SafeWork	Global	http://www.ilo.org/safework
Pan American Health Organization	South America	http://www.paho.org/
Maquiladora Health & Safety Support Network	United States and Mexico	http://mhssn.igc.org/
World Health Organization	Global	http://www.who.int
Finnish Institute of Occupational Health	Finland	http://www.ttl.fi/en/
National Institute for Occupational Safety and Health	United States	http://www.cdc.gov/niosh

Note: These organizations and links were accurate at the time of printing. We takes no responsibility for the content of these sites, whether by inclusion or omission.

Getting Started

Creating a Safety Committee.

There are several key steps to creating a safety committee. If you already have a safety committee, it's important to make sure that the committee is addressing all of the areas included here.

Have representatives from all areas.

Ensure that all departments and all levels of employees are included in the safety committee. The size of the committee will depend on the size and layout of your organization. One tip: make sure that managers know they need to leave their managerial hats at the door of a safety meeting.

Choose positive people.

Make sure that the people that you choose for the safety committee are already positive, safety-oriented people.

Obtain buy-in and commitment.

Your safety committee should be encouraged to set their goals, mission, area of responsibility, and term limits themselves, with some input from executives. They should also name the committee.

Provide resources.

Make the safety committee's job as easy as possible. Provide them with whatever resources they need to start developing a safety culture in organization. This may include training, resource materials, or perhaps just a comfortable place to meet.

Be clear on what you want.

Before the safety committee's first meeting, the company's executives need to decide what issues they will address. Do not hand them the safety manual and walk away. There will undoubtedly be many issues that the committee will need to address, but the issues must be manageable or the committee will get lost in the details. Of course, once a particular issue has been resolved, the committee will want to shift its focus.

Some examples of possible tasks:

- ▮ Assist in developing a safety training program
- ▮ Identify ways to reduce warehouse accidents
- ▮ Develop a policy for reviewing safety procedures

Consider a steering committee.

A steering committee should be made up mostly of executives and managers. There should be a liaison member on both the safety committee and the steering committee. The steering committee can act as a mentor for the safety committee, providing guidance and resources. The steering committee may also have more executive power, enabling the safety committee to do more.

The Safety Committee's First Meeting

The first meeting of the safety committee should be led by one or more executives. An agenda should be circulated beforehand and presented at the beginning of the meeting. The meeting should also start on time to set a good precedent for future meetings.

The agenda might look like this.

9:00-9:10	Introductions
9:10-9:30	Briefing by Tammy Smith, CEO (To discuss the desired scope and mission of the safety committee)

9:30-9:45	Setting of team norms, facilitated by CEO or outside person (These are ground rules that the team will agree to conduct meetings by, such as “Managers will leave their manager hat at the door,” or, “We will listen to each other’s opinions.”)
9:45-10:00	Team name and mission; election of chairperson and minute taker
10:00-10:30	Identification of tasks and actions to be taken
10:45-11:00	Time, place, and agenda for future meetings

Identifying Hazards

What is a Hazard

The meaning of the word hazard can be confusing. Often dictionaries do not give specific definitions or combine it with the term "risk". For example, one dictionary defines hazard as "a danger or risk" which helps explain why many people use the terms interchangeably.

There are many definitions for hazard but the more common definition when talking about workplace health and safety is:

A **hazard** is any source of potential damage, harm or adverse health effects on something or someone under certain conditions at work.

Basically, a hazard can cause harm or adverse effects (to individuals as health effects or to organizations as property or equipment losses).

Sometimes a hazard is referred to as being the actual harm or the health effect it caused rather than the hazard. For example, the disease tuberculosis (TB) might be called a hazard by some but in general the TB-causing bacteria would be considered the "hazard" or "hazardous biological agent".

What are Examples of a Hazard?

Workplace hazards can come from a wide range of sources. General examples include any substance, material, process, practice, etc that has the ability to cause harm or adverse health effect to a person under certain conditions. See Table 1.

Table		1
Examples of Hazards and Their Effects		
Workplace	Example of	Example of Harm

Thing	Knife	Cut
Substance	Benzene	Leukemia
Material	Asbestos	Mesothelioma
Source of Energy	Electricity	Shock, electrocution
Condition	Wet floor	Slips, falls
Process	Welding	Metal fume fever
Practice	Hard rock mining	Silicosis

As shown in Table 1, workplace hazards also include practices or conditions that release uncontrolled energy like:

- Ñ an object that could fall from a height (potential or gravitational energy),
- Ñ a run-away chemical reaction (chemical energy),
- Ñ the release of compressed gas or steam (pressure; high temperature),
- Ñ entanglement of hair or clothing in rotating equipment (kinetic energy), or
- Ñ contact with electrodes of a battery or capacitor (electrical energy).

What is risk?

Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. It may also apply to situations with property or equipment loss.

For example: The risk of developing cancer from smoking cigarettes could be expressed as "cigarette smokers are 12 times (for example) more likely to die of lung cancer than non-smokers". Another way of reporting risk is "a certain number, "Y", of smokers per 100,000 smokers will likely develop lung cancer" (depending on their age and how many years they have been smoking). These risks are expressed as a probability or likelihood of developing a disease or getting injured, whereas hazards refer to the possible consequences (e.g., lung cancer, emphysema and heart disease from cigarette smoking).

Factors that influence the degree of risk include:

- Ñ how much a person is exposed to a hazardous thing or condition,
- Ñ how the person is exposed (e.g., breathing in a vapour, skin contact), and
- Ñ how severe are the effects under the conditions of exposure.

What is a risk assessment?

Risk assessment is the process where you:

- Ñ identify hazards,
- Ñ analyze or evaluate the risk associated with that hazard, and
- Ñ determine appropriate ways to eliminate or control the hazard.

The OSH Answers Risk Assessment has details on how to conduct an assessment and establish priorities.

What is an adverse health effect?

A general definition of adverse health effect is "any change in body function or the structures of cells that can lead to disease or health problems".

Adverse health effects include:

- Ñ bodily injury,
- Ñ disease,
- Ñ change in the way the body functions, grows, or develops,
- Ñ effects on a developing fetus (teratogenic effects, fetotoxic effects),

- Ñ effects on children, grandchildren, etc. (inheritable genetic effects)
- Ñ decrease in life span,
- Ñ change in mental condition resulting from stress, traumatic experiences, exposure to solvents, and so on, and
- Ñ effects on the ability to accommodate additional stress.

(Source : <http://www.ccohs.ca>)

The Hazard Identification Process

Hazard Identification Techniques

Identifying hazards is a key step in making the workplace safer. This is a task that the safety committee can take on, with the assistance of all employees in the workforce. There are several key ways to identify hazards.

Look at accident reports.

Review past accidents and near misses. List the key facts of the incidents and look for patterns.

Perform a job safety analysis.

Although this can be time consuming, it is the best way to identify hazards. With this method, you review each job. You look at each task that the job entails and the method used to perform each task. Then, review each step for possible hazards. (A good way to test the safety of the step is to think, “Would I want my child doing this task this way?”) Ideally, this analysis will be performed with the employee to ensure every possible hazard is identified.

Perform a walk through.

Walk through the work site and look for hazards.

Use a checklist.

A checklist can help organize the walkthrough, ensuring that nothing is missed. It can also help identify common industry hazards. However, it may be too comprehensive or it could exclude aspects particular to your workplace. If you’re going to use a checklist, have the safety committee review it first to ensure that it is applicable and appropriate.

Common Hazards

Hazards will differ from workplace to workplace as there are so many variables to consider. However, here are some of the most common types of hazards.

Area	Description
Health	Extreme temperatures, air quality, noise
Biological	Exposure to illnesses, sick buildings (i.e., those with mold or toxins)
Chemical	Toxic substances (gases, solids, or liquids)
Ergonomic	Activities that can cause repetitive strain injuries
Physical	Physical elements of the workplace, including lighting, floors, ceilings, stairs, ramps, and machinery

Reviewing Hazards

It is important to note that hazards should be reviewed at a pre-determined interval. Other events that may trigger hazard re-identification can include:

- Ñ Addition of new equipment
- Ñ Office re-location
- Ñ Change in job responsibilities
- Ñ New pattern of incidents
- Ñ Issue raised by staff member

Resolving Hazards

The Three Methods

The Occupational Safety and Health Administration (or OSHA) is the governing body for workplace safety in the United States. They have identified three ways of resolving hazards; that is, modifying the task at hand so that it is no longer unsafe.

Engineering Controls

This method of hazard resolution adds safety elements into the design of the hazard. This can include stairway railings, ventilation, guards on saws, or changing the substance used in a process so that it is no longer hazardous. These resolutions should be the first ones taken to resolve a hazard.

Work Practices

This method changes the way workers perform a task to make it safer. This may include sign in-sign-out procedures, or it may involve rotating employees on or off of shift work. These methods should be looked at after engineering controls are applied.

Personal Protective Equipment

This should be the last avenue of hazard resolution. It requires the employee to act in a particular way to reduce the hazard. Some examples of this include requiring the employee to wear a respirator, use a safety harness, or wear gloves.

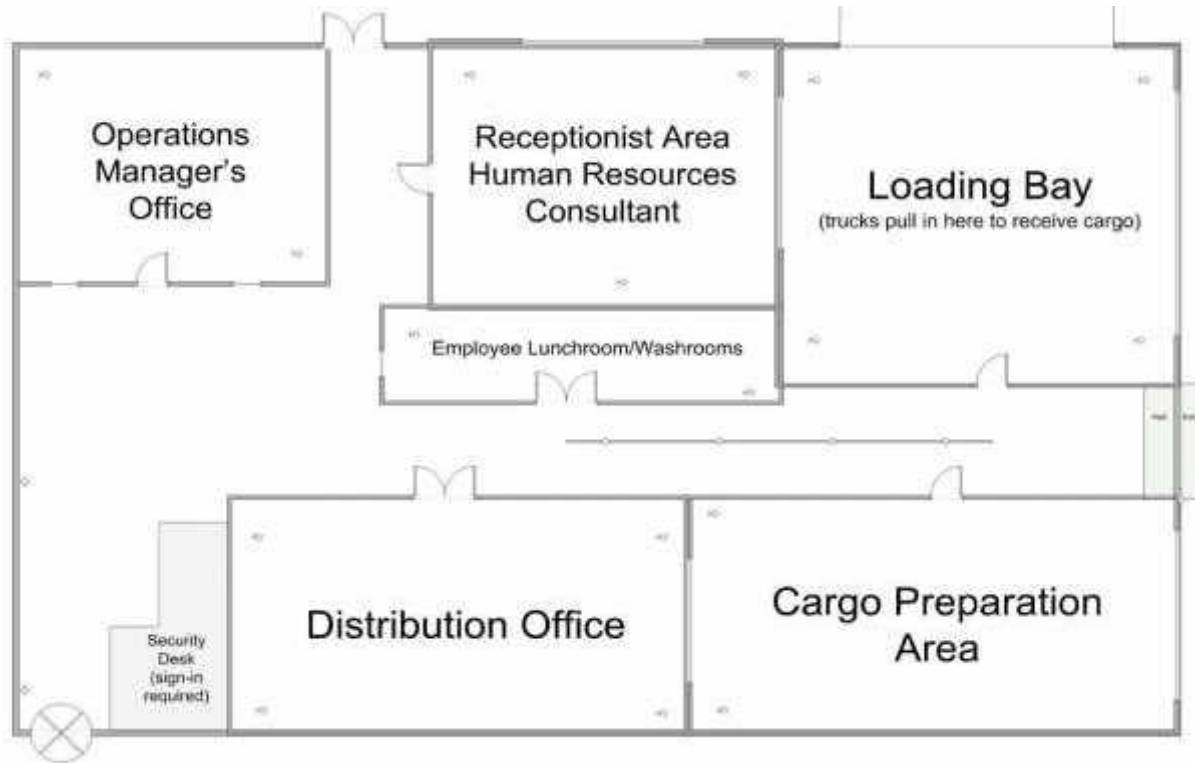
Note that these resolutions can be (and often are) combined for maximum safety.

Hazard Resolution for the Acme Widget Company

Case Study

Floor Plan

The Acme Widget Company manufactures and distributes widgets. It occupies the main floor of a warehouse. The floor plan looks like this:



Staffing Hours

The staff and their hours are outlined below.

Staff Member	Responsibility	# of Staff	Hours Worked
Security guards	Patrol building and grounds every half hour	2	7 am to 7 pm (Sun-Wed)
		2	7 am to 7 pm (Thu-Sat)
	Monitor security desk and cameras	2	7 pm to 7 am (Sun-Wed)
		2	7 pm to 7 am (Thu-Sat)
		1	Backup; varies
Operations manager	Oversee all staff	1	8 am to 4 pm
Distribution clerks	Check invoices and prepare cargo	2	7 am to 7 pm (Sun-Wed)
		1	7 am to 7 pm (Thu-Sat)
	Transport cargo to loading bay	2	7 pm to 7 am (Sun-Wed)

		1	7 pm to 7 am (Thu-Sat)
		1	Backup; varies
HR consultant	Manage all human resource issues, including personal counseling, hiring, firing	1	8 am to 4 pm, although can be called in off-hours
Receptionist	Respond to incoming phone calls, e-mails, faxes Prepare invoices and send to distribution clerks	3	8 am to 4 pm
		2	4 pm to midnight
		1	Midnight to 6 a.m.
Warehouse Workers	Let trucks into loading bay, place cargo onto trucks, and ensure paperwork is signed and cash received	4	8 am to 4 pm
		4	4 pm to midnight
		4	Midnight to 6 a.m.

Safety Incidents

Here is a log of safety incidents that have occurred in the past year.

Log of Safety Incidents		
Incident	Date and Time	Action Taken
Truck driver backed into boxes in warehouse; boxes fell onto employee	January 6, 20xx (Saturday), 7:19 p.m.	Employee taken to hospital; off work for 17 days
Tape dispenser fell off top shelf of cargo preparation area; hit employee on head	February 10, 20xx, around 10 p.m.	None
Distribution clerk pulled back muscle moving box onto truck	April 10, 20xx, 7:12 a.m.	Clerk off work permanently Purchased forklift to assist with moving boxes

Test Your Knowledge

Task

Resolve the identified hazards at the Acme Widget Company.

Hazard	Engineering Controls	Work Practices	PPE

Taking Proactive Measures

Hiring for Safety

Although you cannot refuse to hire a job applicant based on past workers compensation claims or safety violations, there are some steps that you can take during the hiring process to help keep the worker safe.

- Ñ Have an accurate job description. This will help the candidate decide whether or not they are suited for the position. This is particularly important for positions that require physical fitness.
- Ñ Be up-front about hazards and resolutions.
- Ñ During the interview, ask questions that will help identify the individual's tolerance for stress, teamwork ability, attention to detail, and communication skills.
- Ñ Ensure that the employee has appropriate certifications or is willing to get certified.

Test Your Knowledge

Safety Training

Training is crucial to maintaining a safe workplace. What safety training measures have you participated in?

A Word about Adult Learning

When we are teaching adults, we must be aware of the characteristics of adult learners. Adults often think they are finished with classroom learning until they find there are still problems to solve and issues to explore. In today's world, continuous learning is a key skill for everyone.

Adults are:

- Ñ Voluntary learners
- Ñ Problem-centered (no problem, not as interested in learning)
- Ñ Independent learners

New Employees

People who are new to a particular job or to the organization are at a very high risk for injuries. Often, this is simply because they lack the proper training and/or experience. To address this hazard, ensure that new staff receives safety training immediately. It may also be useful to team the new employee with a more experienced worker. And, make sure you cut them some slack when it comes to performance measures.

Young Workers

The National Institute for Occupational Safety and Health estimates that workers under the age of 24 are much more likely to be injured or killed on the job. There are several reasons for this:

- Ñ Teenagers are typically more prone to risk taking
- Ñ Young workers often perform work in areas that they have not been trained in
- Ñ Young workers are still growing, putting their organs at higher risk of certain injuries
- Ñ Young workers are often trying to prove themselves in the workplace and are reluctant to ask for help

(Source: <http://www.cdc.gov/niosh/topics/youth/>)

To address these issues, make sure that young workers are only performing appropriate tasks and that they are properly trained for those tasks. Make sure that they know where to turn for help. You should also consult legislation in your area; some governments prohibit young workers from working in certain industries.

People with Illnesses and/or Disabilities

If an individual has an illness (chronic or acute) or a disability, these factors must be taken into consideration when assigning work tasks. In the case of illness, you may include a section in your safety plan that tells workers what to do if they're not feeling well. We suggest that the worker inform the supervisor and that the supervisor assign them less strenuous tasks. The supervisor must also make sure that the employee is not on medication that could interfere with their duties. (For example, many over-the-counter cold medications have warnings not to operate machinery while taking it.)

In the case of disabilities, supervisors must work with the person to ensure that they and their co-workers stay safe. Remember, it's an employer's responsibility to be as accommodating as possible.

Above all, don't create general policies, such as, "No persons in wheelchairs will be permitted to work in the factory." A blanket policy is a sure way to become the target of a discrimination lawsuit.

Immigrants

Immigrants are prone to workplace accidents for four main reasons:

- Ñ They feel they are more likely to be fired, even if they have legally immigrated.

- Ñ They may be unfamiliar with laws in the area where they work.
- Ñ English may be their second language.
- Ñ They often work in high-risk areas.

To resolve this, you will want to make sure that immigrants know their rights and obligations. When training, you may use a more visual approach, or you may have safety documents translated. Another approach is for managers to frequently check in with this risk group to answer questions and provide information.

People with Low Literacy Levels

Similar to immigrants, workers with low literacy levels may have a hard time understanding the safety policy. They are often too embarrassed to ask for help. To address this, use visual communications such as posters and videos. Another approach is for managers to frequently check in with this risk group and have a verbal conversation to address any weak areas of knowledge.

Temporary or Part-Time Workers

Temporary and part-time workers often get the short end of the stick when it comes to safety and job-related training. Because of this, they are particularly vulnerable to workplace injuries. Make sure your safety program is relayed to all employees as soon as they begin working for your organization, no matter how long they are there for. Likewise, make sure all employees are properly trained for the tasks that they are performing.

Shift Workers

There has long been a correlation between people who work long or irregular hours and injuries and illnesses. Shift workers who work late hours may feel tired and respond more slowly to hazards. As well, the night shift is often assigned to new personnel who are vulnerable to injury simply because of lack of experience. Shift workers may also miss out on safety events that take place during normal business hours, and they may have fewer resources available to them.

To resolve these issues, take these steps.

- Ñ Make sure shift workers get the same training as everyone else.
- Ñ Ensure a safety representative is present at night.
- Ñ Schedule more frequent breaks during shift work.
- Ñ Keep shift workers under close supervision. Encourage colleagues to monitor each other.
- Ñ Keep their schedules regular with adequate time off.
- Ñ Ensure ventilation and lighting are adequate in the work area.
- Ñ Provide alternate transportation (such as cab vouchers) in case an employee feels too tired to drive home.

Workers Who Work Primarily Outside the Workplace

Workers who telecommute or whose duties are typically performed outside of the workplace (for example, delivery drivers) may miss out on safety training and activities. They are also often isolated, meaning there's no one there to point out their safety errors.

To help correct these problems, ensure that these workers receive the same training as other staff. You may also want to set up a buddy system or have a supervisor monitor their work periodically to make sure they're working safely.

Workers with Personal Problems

Whether it's just a bad day or a more serious issue (such as drug or alcohol abuse or a gambling addiction), personal problems can distract anyone from their task. Even smoking can affect your productivity: think about how fidgety a smoker gets right before that next cigarette.

There's not much you can do to help this risk group except to pay attention and to listen. You may also want to have a safety policy stating that anyone who appears to be under the effects of drugs and/or alcohol will be sent home. As well, consider implementing workplace wellness programs to help employees deal with their personal issues.

Preparing and Implementing a Safety Plan

Writing a Safety Plan

Elements of the Plan

Now that you have a safety committee, you can write a safety plan. Typically, you will want to include the following elements.

Organizational Policy

What is the organization's view on safety management? Who are the key players in the safety culture? A statement from the CEO or president on why safety is important may also be useful.

Hazard Identification

This section addresses the following questions:

- Ñ What hazards have been identified?
- Ñ How are these hazards resolved?
- Ñ When will hazards be reviewed?
- Ñ How will they be addressed?

Emergency Response Plan

When a safety incident occurs, how should workers respond?

Regulations

What codes and standards does the organization operate by? Be sure to refer jurisdictional and federal codes as well as industry or organization-specific codes.

Communication Plan

How will employees be notified of safety changes and issues? What safety materials will be available in the workplace (i.e., posters, videos)?

Ongoing Process

How will the safety plan be reviewed and updated? What audits will be performed?

Employee Involvement

What part do employees play in safety (i.e., safety committee options and personal responsibilities)?
What disciplinary actions will be taken as a result of safety violations?

Training

What safety training will be offered? Is it mandatory or voluntary? Make sure you include the Who, What, When, Where, Why, and How.

Investigation and Documentation Process

When an incident happens, how will it be documented and investigated?

Toolbox

What tools are available to employees to help with the safety process? Where are they located? These tools can include:

- Ñ Location of physical tools, such as accident investigation kits or first aid kits
- Ñ Reporting process
- Ñ Whistleblower protection
- Ñ Suggestion box

Appendix

References to additional, related policies, such as a disaster response plan, harassment policies, or emergency response plans, may be appropriate.

Additional Tips

Some other tips to keep in mind:

- Ñ Once a draft has been written, have several people from different areas of the company go through it. This will help you make sure you have covered all of the bases.
- Ñ Make sure the plan is readable. Use clear, concise language rather than jargon and big words.
- Ñ You may want to have the plan translated into languages other than English depending on your worker demographics.
- Ñ Choose the correct format. While a paper copy is a good idea, you may also want to post it on the company website or provide it in other formats.
- Ñ Supervisors should go over the plan with employees on a regular basis to make sure they read and understand it.

Implementing the Plan

Getting Started

Now that the safety plan has been written, it's time to implement it. Where do you start?

- Ñ Go over the plan with all employees.
- Ñ Put the plan in place immediately.
- Ñ If there are many changes to be made, they may have to be implemented slowly. Start with the biggest hazards.
- Ñ Set a good example by modeling safety yourself.

Empowering Employees

Employees must be empowered to make safety changes at work in order for your safety culture to be successful. Ways that you can do this include:

- Ñ Ensure employees are involved in the safety committee and safety activities
- Ñ Ensure each employee understands their responsibilities for safety
- Ñ Leaders should set a good example by modeling and encouraging safety
- Ñ Safety procedures should be communicated clearly, consistently, and frequently
- Ñ Assign safety tasks to employees
- Ñ Recognize employees for work well done
- Ñ Correct behavior immediately

Remember, your safety culture will only be a success if it is accepted and adopted by your employees.

Test Your knowledge

What challenges do you predict as you move forward with your safety plan?

What solutions might you suggest for these challenges?

T	Take control of the situation.
A	Assess safety hazards.
K	Keep yourself safe. This includes stopping any machinery and removing yourself from dangerous elements (such as live power wires).
E	Ensure others are safe. Make sure that they stop what they are doing and remove themselves from a dangerous environment.
C	Call your emergency help number (e.g. 911) and summon help from within the organization.
H	Help the victim if you are trained and if it is safe to do so. Move the victim as little as possible as it could aggravate their injuries.
A	Activate emergency response plans if appropriate.
R	Reassess the scene for new safety hazards, including bystanders.
G	Get control of the scene. Make sure evidence is not disturbed.
E	Extract yourself. Turn things over to the proper authorities (such as emergency response personnel or management).

Documenting Incidents

Incident-Related Documentation

The documents that you will be legally required to have in the event of an accident will differ depending on where your business is. However, the following information should be gathered immediately after an accident.

- Ñ Type of incident
- Ñ Date, time, and location of incident
- Ñ Employee's personal information (name, address, telephone number)
- Ñ Employee's work-related information (employee number, position, status)
- Ñ People on duty at time of incident and where they were
- Ñ Emergency response personnel
- Ñ Name of hospital that employee was taken to
- Ñ Witnesses' personal information (name, address, telephone number) and testimony

- Ñ Description of incident, including timeline of events, damage, type of accident, hazardous materials or energies involved

Other Documents

In addition to keeping a log of safety incidents, you should document all activities in your safety culture.

This includes:

- Ñ Training
- Ñ Safety manuals
- Ñ Policies
- Ñ Safety materials distributed to employees
- Ñ Minutes of safety committee meetings

Make sure that you are familiar with the reporting and recordkeeping regulations in your area and that you abide by them.

Investigating Incidents

About Safety Investigations

The purpose of a safety investigation is to determine why the accident occurred and how it can be prevented. There are many types of accident investigation techniques, and most require a specialist. This session is designed to give you a brief overview of a simple investigation technique. We encourage you to get certification from a specialized organization if you are going to be performing accident investigations.

Accident Investigation Kit

Your organization should have the following materials gathered together in an accident investigation kit:

- Ñ Company's safety policy and investigation procedure
- Ñ Insurance information (contact information and policy numbers)
- Ñ Graph paper and blank paper
- Ñ Notebook
- Ñ Appropriate forms
- Ñ Pens and pencils
- Ñ Calculator
- Ñ Handheld GPS
- Ñ Cameras (film and digital, both with date and time stamp)
- Ñ Extra batteries and film
- Ñ Measuring tape
- Ñ Tape recorder
- Ñ Flashlight
- Ñ Safety tape

The Safety Investigation Process

Once you are prepared, here are the steps to take.

Step One: Gather Data

Make sure you identify the basic facts of the incident: who, what, when, where, and how. (The “why” will come later.) You will want to include a description of the accident, a timeline, witness reports, photos and sketches, and physical evidence.

Step Two: Determine Probable Cause

In determining the cause, we must aim for prevention, not for blame. For example, “Employee error” is often listed as the cause for an accident. “Lack of proper training in forklift use” would be a better probable cause because it’s something we can try to resolve. There are many tools out on the market that can help you determine the root cause, including checklists and simulations.

Step Three: Identify Effective Solutions

Effective solutions have three characteristics:

- Ñ They must help prevent a recurrence of the incident
- Ñ It must be something that you can control
- Ñ It must be in line with your organization’s values

In the example above, “Lack of proper training in forklift use” was identified as the probable cause. Retraining the affected employee is not an effective solution because it will likely not prevent a recurrence of the incident. Re-designing forklift training and re-certifying employees is a better solution; if all employees have better knowledge of how to operate the machine, this will resolve the hazard.

Step Four: Assign Responsible Parties and Reasonable Target Dates

Once you have identified the solutions, put them in action. Determine who will implement the solution, what will be done, when it needs to be completed by, how it will be evaluated, and who will monitor progress.

Step Five: Write Final Report

Your report should include all the data gathered, the probable cause, the solutions identified, and the action plan for the solutions.

Step Six: Communicate Results

The highlights of the report (what happened and what the organization plans to do about it) should be communicated to all employees. More detailed information may be appropriate for those affected by the incident.

Step Seven: Track Solutions

The accident investigator is typically responsible for tracking solutions as they are implemented to ensure that they are implemented correctly and on time.

Step Eight: Evaluate Solutions

Monitor the workplace for recurrences of the incident. Did the solution work at preventing occurrences of this incident? If not, you will need to re-evaluate the probable cause and effective solutions.

(This process was developed by Ronald Meyers and R. Alan Thomas as part of the Transform 180 safety program.)

Near Misses

A near miss is just that: an accident that almost occurred. There is nothing more frustrating than to be discussing an accident in the lunchroom and to hear someone say, “Well, I knew someone would fall through that step sooner or later; I almost put my foot through it last week!”

It is important that near misses be treated with the same seriousness as actual incidents. You must have a method for dealing with near misses in your safety plan. We recommend that:

- Ñ Employees are required to report near misses as soon as they occur.
- Ñ Managers are required to complete a form detailing the near miss and to take action to minimize the hazard as much as possible.
- Ñ The near miss is reported to the safety committee ASAP.
- Ñ The safety committee determines what action to take (full investigation, hazard review, etc.).
- Ñ Action is monitored by the safety committee using steps seven and eight in the accident investigation process.

Reviewing the Program

The final essential component of your safety plan is to include a review process. This process will depend on the size of your company and the size of your plan. We recommend that the plan be reviewed annually. Hazard identification will also need to be reviewed annually, or when there is:

- Ñ Addition of new equipment
- Ñ Office re-location
- Ñ Change in job responsibilities
- Ñ New pattern of incidents
- Ñ Issue raised by staff member

Your options for reviewing the safety plan include:

- Ñ Use of checklists
- Ñ Visual inspections

- Ñ Employee interviews
- Ñ Rating procedures
- Ñ Outside consultants
- Ñ Review of statistics, such as incidence rate and lost days
- Ñ Review of reports and incidents
- Ñ Review of training programs and other safety materials
- Ñ Review of safety regulations in your area to ensure that you are up-to-date

Further Reading:

- ✓ *Safety Culture: An Innovative Leadership Approach, By Nathan Crutchfield, James Roughton, (2013)*
- ✓ *Safety Culture: Assessing and Changing the Behaviour of Organisations, By Dr John Bernard Taylor, (2012)*
- ✓ *Hazard Identification, By Geoff Wells, (1996)*
- ✓ *Hazard Identification, By Frank Crawley, Brian Tyler, (2003)*
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