Effective safety committees are required in several states and provide substantial benefits to companies and other organizations. Unfortunately, most safety committees do not understand their purpose or the role they play in assisting management to provide a safe and healthful workplace. This course helps the student understand his/her responsibilities as a safety committee member. It will help the safety committee chairperson successfully lead a safety team and develop a world-class safety culture.
OSHAcademy Course 701 Study Guide

Effective OSH Committee Operations

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Contact OSHAcademy to arrange for use as a training document.

This study guide is designed to be reviewed off-line as a tool for preparation to successfully complete OSHAcademy Course 701.

Read each module, answer the quiz questions, and submit the quiz questions online through the course webpage. You can print the post-quiz response screen which will contain the correct answers to the questions.

The final exam will consist of questions developed from the course content and module quizzes.

We hope you enjoy the course and if you have any questions, feel free to email or call:

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Course 701
Course Introduction

Safety committees are not required in all 50 states, but they should be, as they can be extremely helpful in making sure an effective safety culture is developed and maintained. This course will introduce you to the various responsibilities that a safety committee typically has in a company. If your company doesn't yet have a safety committee, let's get one going!

Safety committees mean involvement!

Involving your employees in an activity such as a safety committee that directly affects their safety and health is the right thing to do. Below, are reasons why it's also the smart thing to do.

- Rank and file workers are the persons most in contact with potential safety and health hazards. They have a vested interest in effective protection programs.
- Recent experience has demonstrated that line workers and other rank and filers make highly valuable problem-solvers.
- Group decisions have the advantage of the group's wider field of experience.
- Research shows that employees are more likely to support and use programs in which they have had input.
- Employees who are encouraged to offer their ideas and whose contributions are taken seriously are more satisfied and productive on the job.
- You, the owner/manager, have a solid grasp of your overall operations. Line workers, on the other hand, probably have a more detailed knowledge of each operation and task at your worksite.
- Employees who understand the hazards associated with workplace operations will realize that they have the most to gain from preventing or controlling exposure to those hazards. Knowledgeable and aware employees tend to be safe workers and good sources of ideas for better hazard prevention and control.

Communications is the Key!

The key to a successful safety management system is effective communications and the safety committee can help to make sure that happens. Consequently, in this course we are going to explore concepts and tools to help you start and grow an effective labor-management safety
committee, assess and evaluate your current safety committee, and recommend changes to improve the effectiveness of your safety committee.
Module 1: Role, Purpose, Function

The Safety Committee’s Role

You don’t have to climb a mountain and sit on a big rock for six days to visualize the role of the safety committee. However, it will take a more thought to develop the safety committee’s role to meet the expected behaviors and outcomes necessary to fulfill its role.

First, let’s look at the concept of "role" and how it applies to the safety committee. Look up the definition of "role" and you'll find something like:

- A part assumed or played by a person or group in a particular situation;
- The position a person or group has in a situation, organization, or relationship.
- A prescribed or expected behavior pattern associated with a position or status in a group or organization.

As you can see, a role defines who we are, how we should behave personally, and what we should do as individuals or groups.

I’m sure the position you hold in your company has some sort of formal title that helps you and others identify your role and associated duties. Along with that role come assigned responsibilities and status. Every role you play has with it a set of expected behaviors and activities that are considered appropriate for that role.

Take a look at the following list of common roles we play. The odds are you play one or more of these roles.

- **At home**: mother, wife, father, husband, son, daughter, aunt, uncle.
- **In the community**: youth group leader, coach, club officer.
- **At work**: receptionist, supervisor, welder, trainer, nurse.

Of course, there are many more roles we can play, but you get the idea. Each role is unique with its own set of performance expectations.

**Quiz Instructions**
Read the material in each section to discover the correct answer to questions. Circle the correct answer. When you’re finished go online to take the final exam. This exam is open book, so you can use this study guide.

1. Which of the following is a term we use to define who we are and what is expected of our individual and group behaviors?

   a. Role
   b. Responsibility
   c. Accountability
   d. Expectation

**The Vision Statement**

To help the safety committee function better, each member must understand this basic principle:

*What we do depends on who we think we are.*

For example:

- If safety committee members believe they are consultants, they will do and say things that send a message they can be trusted. Employees will seek their help and appreciate their work.

- If safety committee members believe they are cops, they will do and say things in a manner that is likely to result in mistrust. And, as we know, an effective safety culture cannot exist in a climate of mistrust.

**The Vision Statement**

To better understand and convey the role of your safety committee as an internal consultant team providing expert advice and assistance, think about creating a "vision statement." The vision statement describes *who you are.* A good vision statement will help you determine what to do and make it more likely that you'll realize that vision.

**Sample Vision Statement:** "The safety committee helps management lead in creating a world-class safety culture through educating employees and consulting with management."

Safety committees that perform as internal consultants will:

- survey and interview employees to find out what they are thinking and feeling;
• observe employees to analyze behaviors;
• inspect the workplace to uncover hazardous conditions;
• audit safety programs;
• uncover the surface and root causes of safety problems;
• develop and submit written recommendations;
• monitor the progress of corrective actions and system improvements; and
• evaluate the long-term quality of the safety culture.

A final word about vision: You may be wondering why some safety committees fail. Well, I'm sure you're familiar with the saying, "Where there is no vision, the people will perish." (Proverbs 29:18) The same principle applies to safety committees.

2. What safety committees do depend on _____.
   a. their vision: who they think they are
   b. what they're told to do by management
   c. the safety committee's directives
   d. what makes common sense to its members

Multiples Roles

As a safety committee member, you perform multiple roles. Let's see how this affects your responsibilities:

• **Safety committee member**: When performing the role of a safety committee member, you are basically performing the role of an internal consultant:
  o Warn employees, but do not report "names" to the supervisor.
  o Report unsafe behaviors to the committee chairperson so the safety committee can discuss how to fix the surface and root causes.
  o Help managers and supervisors gain the knowledge, skills, and abilities (KSAs) to better enforce, supervise, and manage safety by giving them useful information.
• Listen to employee concerns and suggestions about safety and give that information to the safety committee.

• Educate and assist employees, but do not try to enforce safety rules: that’s a line responsibility.

• **Line employee**: When performing the role of a line employee, you have a responsibility to warn the employee, but again, you’re not a cop. Your job is not to enforce safety. Report the behavior to your safety committee member. If you are comfortable with it, report the behavior to your supervisor without naming names.

• **Supervisor/Manager**: When performing the role of supervisor or manager, you are the employer’s agent, responsible for providing training, resources and enforcing safety. For example:
  
  o Suppose you catch someone violating a safety rule. You have properly trained the employee and provided proper resources, time, support, etc. You’re probably justified in disciplining the employee.
  
  o Address behaviors with everyone in training and safety meetings. It resets employee accountability when the supervisor tells all employees they cannot engage in a particular unsafe behavior.

**Enforcing Safety Rules is Not the Safety Committee's Job**

Some companies inappropriately assign safety enforcement responsibilities to the safety committee. However, writing "tickets" for violating safety rules can be especially disastrous to the committee's effectiveness: Don't do it. Enforcing safety is legally a line management responsibility, not a staff responsibility.

### 3. As a safety committee member, which activity below would be inappropriate?

a. Monitoring the hazard communication program
b. Making recommendations to improve safe procedures
c. Reporting the names of individuals working unsafely
d. Helping the employer develop interest in workplace safety
Role Conflict

Suppose you are a member of your company safety team and a supervisor. How do you discipline your employees for unsafe behavior? Let's look at a scenario below to set the scene.

Scenario

Larry is a member of the company's safety committee. However, he is a supervisor as well. During his workday, he notices one of his subordinates is not wearing required personal protective equipment (PPE). Larry wants to correct the unsafe behavior; however, he is unsure how to proceed.

Since Larry is a line supervisor, should he discipline the workers, or should he refrain from discipline because he is a safety committee member?

How would you respond in the above situation? The response depends on the role you are playing at the time you discover the unsafe behavior. For instance:

- If you are conducting a safety inspection as a safety committee member, intervention would be appropriate when observing unsafe behavior. Disciplining the employee, in this case, might be inappropriate and counterproductive to the safety committee's mission.

- Suppose you are conducting an inspection as a supervisor and spot the unsafe behavior. In that case, discipline may be necessary as appropriate.

To prevent role conflict like this, you might ask someone else to conduct the inspection in your department.

4. You are a supervisor conducting a safety committee inspection. How would you respond when you see an employee failing to work safely?

a. Be sure to discipline the employee on the spot
b. Observe the unsafe behavior and take no other action
c. Intervene but do not discipline
d. Tell the employee that you will inform his supervisor of the infraction
The Safety Committee's Purpose

Armed with insight into the safety committee's role, let's take a look at what the committee's purpose and function might be. We'll start by looking at the purpose of the safety committee. A quick review of our friendly dictionary once again defines "purpose" as "a desired or intended result or effect."

For safety committees to successfully fulfill their role, they need to understand their purpose and achieve intended outcomes. If the safety committee does not understand it's purpose, it may actually produce unintended outcomes.

Safety committees are created and developed to fulfill the following purposes:

- help to protect the employer by providing useful information;
- help to protect the employee by responding to safety concerns;
- bring labor and management together in a cooperative way to solve problems;
- help the employer educate and motivate all employees about the importance of safety; and
- help the employer educate and motivate all supervisors and managers to identify hazards and take corrective action.

These purpose statements emphasize the safety committee's responsibility to help the employer do (manage) safety, not to do safety for the employer. This important idea is why we encourage safety committees to think of themselves as internal consultant groups, but not as safety "cop squads."

The Mission Statement

A safety committee should write a mission statement that explains what they do to support their vision. The safety committee's purpose might be viewed as its mission and describes the activities above to support its assigned role.

Sample Mission Statement: "It is the mission of the Safety Committee of XYZ Company to promote a safe working environment for all employees by assisting in the overall effort to minimize the frequency of accidents, and to identify corrective measures needed to eliminate or control recognized safety hazards."
5. To tell everyone what the safety committee intends to do, write a _____.
   a. vision statement
   b. mission statement
   c. policy statement
   d. company advertisement

The Road to Hell is Paved with Good Intentions

Earlier, we mentioned that the safety committee’s "purpose" is why it exists and what it intends to achieve. How effectively the safety committee functions to achieve its purpose depends on how well each safety committee member performs.

The safety committee may have the best intentions in fulfilling its purpose, but what happens if the committee suffers from poor vision, leadership, and management? What if meetings are infrequent and boring, members think of themselves as cops, and no one wants to volunteer for membership? The committee may actually function so poorly that it harms rather than helps a safety program. Good intentions do not always produce the results you want.

The safety committee cannot function effectively without each member having a clear vision, strong leadership, and sound management practices. Members must have adequate knowledge, skills, and abilities (KSAs) to function successfully.

For instance, the safety committee may intend to increase interest in safety by implementing a safety incentive program, but if its members do not have the KSAs to accomplish this task, they may unintentionally develop a totally reactive incentive program that’s a dismal failure.

6. A clear vision, strong leadership, sound management practices are necessary to ensure the safety committee properly _____.
   a. mandates safety requirements
   b. meets at least weekly
   c. enforces safety rules
   d. functions as intended
Module 2: Getting Started

Kick Start Your Committee!

Don't pass this module up just because you already have a safety committee!

This module is designed to help if you are trying to start a new safety committee. Even if you have a safety committee, be sure to complete this module. You’ll still receive some good information to help further develop your safety committee’s effectiveness. At a minimum, it will be a great review for you.

Sell the Idea to the Boss

Let's say your company does not have a safety committee. You are convinced that the company would benefit if it had a committee, but how do you sell the idea to the CEO?

You've got to talk the "$$bottom line$$" to get management's attention.

An effective safety committee may help prevent employees from getting hurt or killed on the job. It may also help decrease future direct and indirect accident costs. Consequently, an effective safety committee is should be considered a profit center, not a cost center for the company.

1. An effective safety committee _____.
   a. is a cost center
   b. is a profit center
   c. is accountable to OSHA
   d. enforces safety daily

Benefits of a Safety Committee

The benefits of an effective safety committee far outweigh the cost of its operation.

- The safety committee performs the role of an internal consultant to the employer. If your employer hired an external consultant, it would cost thousands of dollars for the same service the safety committee can provide in-house.

- The safety committee acts as a forum for management and labor to communicate safety related concerns. The benefits from improved communications may be hard to quantify, but they may be substantial.
• Every hazard the safety committee identifies and is directly involved in eliminating results in significant savings in potential accident costs.

• The safety committee can serve as a valuable problem-solving group that addresses workplace conditions, morale and quality. By developing solutions, the safety committee improves the company's competitive advantage.

• The safety committee is an excellent opportunity for employees to improve their professional skills in communications, human relations, problem solving, meeting management, and analysis.

• Since supervisors and managers should be informed about occupational safety and health, the safety committee is a natural "school" of preparation for future company managers. In fact, some companies even make it a prerequisite.

2. The safety committee performs the role of an internal _____ to the employer.

   a. consultant
   b. supervisor
   c. officer
   d. contractor

Who the Safety Committee Protects

As we just saw, by identifying and controlling hazards and unsafe work practices, the safety committee protects employees and save lives. The safety committee also protects the employer by reducing direct and accident costs by many thousands of dollars.

According to the U.S. Bureau of Labor Statistics (BLS), nearly 2.7 million non-fatal workplace injuries and illnesses were reported by private industry employers in 2020. According to the Liberty Mutual Workplace Safety Index, disabling workplace injuries cost businesses more than $58 billion every year.

What do these statistics mean to you? Effective profit centered safety committees have the potential to save not only lives and limbs, but lots of money. Many thousands of dollars each year can be saved in each company every time a safety committee uncovers and helps the employer eliminate hazardous conditions or unsafe work practices.
Every dollar invested in proactive safety, including safety committee activities, may return hundreds back. You've got to convince management that an effective safety committee not only saves lives but saves money too.

3. Effective _____ safety committees have the potential to save not only lives and limbs, but lots of money.
   a. centralized  
   b. cost center  
   c. profit center  
   d. non-volunteer

Write it Down
It's important to make sure the safety committee has a written policy statement to guide its actions. The policy statement should include:

- the role and purpose(s) of the safety committee;
- reasons for establishing the safety committee;
- the need for management and employee participation;
- the need for support by all departments;
- responsibilities of the committee; and
- duties of committee members.

Getting Organized
OK, you know the safety committee is going to be composed of a number of people from management and the labor force. What kind of structure should the safety committee take? Typically, the committee will have a chairperson (some will also have a co-chair), a recorder, and of course a number of members. You don't need a complicated bureaucratic structure.
4. Which of the following topics should a policy statement include?

a. The role and purpose of the safety committee
b. Who is not attending the committee meetings
c. Which level of management is participating
d. Accident reports

Duties of the Chairperson

The chairperson's job is, of course, one of the most important on the committee. He or she is the key coordinator ensuring the safety committee operates effectively. Below are some of the very important responsibilities of the chairperson.

- prepare an agenda for meetings
- arrange for meeting room
- notify members of meeting dates/times
- distribute agenda
- delegate responsibilities
- preside and conduct the meeting
- enforce committee ground rules
- communicate with the employer
- report the status of recommendations

5. Which of the following is a chairperson's job on the committee?

a. Prepare an agenda for the meetings
b. Supervise the committee president
c. Write minutes of the meeting
d. Prepare accident reports
Duties of the Safety Committee Recorder

Let's not forget another very important responsibility: that of the recorder or secretary. This person assists the chairperson in making sure all communications are accurately recorded and distributed to committee members and others. Some duties of the recorder may include:

- assisting the chairperson with agenda;
- recording minutes of the meeting;
- distributing and posting the minutes; and
- assuming the chairperson's duties if necessary.

6. Which of the following is a recorder's job on the committee?
   a. Delegating responsibilities
   b. Arranging for a meeting room
   c. Recording meeting minutes
   d. Doing exercises

Duties of the Safety Committee Member

For the safety committee to operate most effectively, everyone on the committee needs to be involved in some way. Safety committee members should do more than just report safety concerns from their departments. Below are some ideas for members.

- Receive suggestions, concerns, reports from employees
- Report employee suggestions, concerns, reports to committee
- Report back to employees on their suggestions, concerns, reports
- Attend all safety committee meetings
- Receive training on safety and health subjects
- Review injury and illness reports
- Monitor safety and health programs and syste
• Set example by taking action
• Conduct safety inspections
• Make recommendations for corrective action
• Assist in communicating committee activities to all employees

7. Which of the following is a committee member’s job?
   a. Delegating responsibilities
   b. Conducting the meeting
   c. Distributing meeting minutes
   d. Conducting safety inspections

Safety Committee Membership

The makeup of the committee membership is a very important consideration. Establishing joint labor-management committees is a popular method of employee participation. They are extensively and successfully used in many European countries and Canadian provinces.

Other types of committees have been used successfully for safety and health participation. At many unionized worksites, employee safety committees with members selected by the union or elected by employees work alone, without management, on various tasks. At some worksites, hourly workers participate on a central safety committee.

Some worksites use employee or joint committees for specific purposes, such as inspecting the site for hazards, investigating accidents and incidents, and training new employees. Finally, although they go by a different name, quality circles are another form of committee. They focus, at least part of the time, on identifying and resolving health and safety problems.

8. Safety committees work best when _____.
   a. they are union-selected committees
   b. only employees are represented
   c. management runs the committees
   d. both management and labor are represented
**Makeup of the Safety Committee**

Suppose one of the purposes of the safety committee is to bring management and labor together in a cooperative effort to improve the safety and health of workers. In that case, it just makes business sense to include representatives from management ranks and the work floor.

Management and labor can sit together and discuss their unique and common concerns regarding safety. The safety committee becomes a forum for management and labor to ensure mutually acceptable solutions to problems can be reached.

It's important that the safety committee not be dominated by management or any one individual, be it the safety director, chairperson, or member. To make sure this does not happen, establish ground rules, and techniques for decision-making that promotes group consensus.

The safety committee should not be dominated by management in general, or any one individual.

The safety committee mustn't be dominated by management in general, or any individual, be it the safety director, chairperson, or member. To make sure this does not happen, establish ground rules and decision-making techniques that promote group consensus.

Management representatives and the chairperson will be the primary conduits of communications between the safety committee and the employer. Committee members are the primary communicators with employees. It's very important communication occurs in both directions.

9. Why is it important to establish ground rules and techniques for decision-making that promotes group consensus?

   a. To make sure the safety manager controls the committee
   b. Because the law requires it
   c. To assure everyone thinks and acts appropriately
   d. To make sure one person does not dominate the committee
Module 3: Motivating Involvement

Introduction

The safety committee should be composed of both managers and employees who understand its role, purposes, and activities and are interested in its success. It seems most companies experience varying degrees of difficulty generating enthusiasm for the safety committee. We'll look at the possible reasons for this, and then discuss some solutions.

Safety Committees Mean Involvement

Involving your employees in an activity such as a safety committee that directly affects their safety and health is the right thing to do. Below are reasons why it's also the smart thing to do.

Here are some of the benefits of involvement in the safety committee:

- Line workers are in frequent contact with potential safety and health hazards. They have a vested interest in effective protection programs.
- Experience has demonstrated that line workers can be highly valuable problem-solvers.
- Group decisions have the advantage of the group's wider field of experience.
- Research shows that employees are more likely to support and use programs in which they have had input.
- Employees encouraged to contribute their ideas, and those ideas are taken seriously are more satisfied and productive on the job.
- Owners and managers have a solid grasp of the company’s overall operations. On the other hand, line workers probably have a more detailed knowledge of each operation and task at your worksite.
- Employees who understand the hazards associated with workplace operations will realize that they have the most to gain from preventing or controlling exposure to those hazards. Knowledgeable and aware employees tend to be safe workers and good sources of ideas for better hazard prevention and control.

Perceptions Drive Reality

Many reasons might explain why both managers and employees have no interest in a safety committee. What drives that lack of interest? Their perceptions.

Perceptions that might cause a lack of interest in the safety committee include:
• Why join the safety committee? Who cares?
• Safety committee members are "volunteered" against their will;
• Meetings are boring and a total waste of my time;
• Safety committee members aren't properly trained;
• Safety committee duties would cut into my busy schedules;
• One person dominates all of the meetings;
• The safety committee never gets anything done;
• Safety committee meetings end up just being gripe sessions; and
• The safety committee is just a pack of snitches.

1. Why might employees generally have no interest in being involved in a safety committee?
   a. They don't feel smart enough
   b. Negative perceptions about membership
   c. Lack of adequate compensation
   d. The lack of career advancement

Gaining Credibility with Management

What does it mean to be credible? A quick look in the dictionary tells us that to be credible means, "capable of being believed: deserving confidence."

What's the message here? Credibility must be earned!

So, the real question to ask is, "What can the safety committee do to increase its credibility and earn confidence in its recommendations?"

To get things done, you must have credibility. To do that, safety committees must demonstrate expert power and position power.

Expert Power

To be believable, members of the safety committee have a clear understanding of their role, purpose, duties, and responsibilities. They need to understand where their responsibility ends, and where management's responsibility takes over.
When the safety committee realizes they play the role of an internal consultant to the employer, they know that their credibility depends on the expertise they bring to the role. How do you gain expertise? By increasing your knowledge and gaining experience.

Writing and submitting effective recommendations to management is crucial if credibility is to be gained. The most effective recommendations will discuss costs and benefits and offer reasonable options for correcting workplace hazards, unsafe work practices, and ineffective administrative controls.

Position Power

Another strategy for gaining credibility is to increase the committee's position power. A characteristic of position power is access to the decision-makers. Does the safety committee chairperson have access to the CEO? Does the committee "have the ear" of the person in charge? A safety committee's position power is strengthened when it communicates with the head of the organization. Which safety committee has more position power: The committee that reports to the deputy director for human resources, or the committee that reports to the CEO? The principle here is that for the safety committee to increase its own position power, it must communicate directly with the powerful positions found within the organization.
2. Which two forms of power are necessary for the safety committee to gain credibility?

a. Expert and position power  
b. Position and reward power  
c. Control and coercive power  
d. Charismatic and referent power

Gaining Credibility – Communication

Effective communication is key in establishing expert and position power.

When employees inform or make suggestions, they expect to get something done and feedback soon after that. They naturally want to see action. Suppose safety committee representatives take the information to the safety committee but neglect to give management and employees feedback. What is management going to think about the safety committee?

Therefore, to gain credibility with managers and employees, communicate regularly and often with them. If a hazard can't be fixed for a while, let people know why. They will appreciate it, even if it's not the answer they want to hear. The safety committee has done its job.

Another good idea is to appropriately "brag" about safety committee accomplishments. I don't mean that the committee members should go out and literally brag about how great they are. Just let employees know about safety committee accomplishments and do so with some excitement and pride.

*Employees see the safety committee as a communications conduit to management.*

3. What is necessary for safety committees to gain credibility with employees?

a. Top management recognition  
b. Safety committee meetings  
c. Regular communication  
d. Consistent enforcement

Apathy

Apathy in and towards the safety committee is common in some companies. There may be many reasons, but this problem is usually due to factors that can be influenced by the safety committee and top management.
Lack of commitment by top management is likely the most common complaint given by safety committee members for a lack of accomplishment that fosters apathy. But, are safety committees premature in "blaming" management for all their ills?

It's good to remember that when you've got the finger of blame pointed outward, three other fingers are pointing inward. Safety committee members may want to first reflect on how well they are fulfilling their own responsibilities before accusing management for lack of success.

As we mentioned in Module 1, safety committees must have a clear vision to succeed. Management, as well, must have a vision for safety. Safety committees can help management gain that vision by "educating up" - giving management information about successful safety committees' benefits.

Another less common but important reason safety committees fail is because meetings are too long and boring. Watch the video to get some good ideas on improving the quality of safety committee meetings.

If safety committees suffer from a lack of involvement, ways to turn that situation around include:

- Get management agreement to provide incentives like recognition, rewards, training, bonuses, and career progression to motivate employees to volunteer as committee members.

- Make sure safety committee meetings are short - no longer than one hour. Provide refreshments like pizza, pastries, or coffee.

- Communicate safety committee accomplishments to the workforce.

4. What is the most common complaint safety committees give for their failure to be effective?
   a. Lack of top management support
   b. Low employee participation
   c. Lack of control of safety
   d. No one cares, so why bother
Motivation

It goes without saying that the most successful safety committees are composed of volunteers. It’s better to get someone to do something because they want to be involved, not because they have to be involved.

Suppose employees know why membership is important or contributes to their own and their company's success. In that case, they are more likely to be a motivated volunteer!

However, when employees are not interested in committee membership, management may use the "carrot and stick" strategy to do something about it.

- **Positive Consequences** (the carrot). Management might try to motivate employees using positive recognition and reward if they volunteer for membership (the carrot). This is the most effective motivational strategy. Employees will actively participate in the committee.

- **Negative Consequences** (the stick). Management might use some form of intimidation or coercion to get employees to "volunteer" themselves. This strategy is successful only to achieve compliance. Employees will show up to committee meetings, but that’s about it.

So, how can management best use positive consequences to motivate employee involvement in the safety committee?

5. How does management best ensure a long-term all-volunteer safety committee?

   a. Rotate membership in committees
   b. Reward and recognize those who volunteer
   c. Require membership in committees
   d. Reprimand those who do not volunteer

Management Support and Commitment

Management demonstrates support through communication and commitment through action. Support is shown by saying that the safety committee is important. However, commitment is demonstrated through action, for example, by investing time and money into the safety committee.

**Support: How is support expressed?**
• **Formally** through the mission statement, policies, job descriptions, and performance appraisals.

• **Informally** through word of mouth; a simple recognition of a job well done or appreciation expressed before a group of peers.

• **Commitment:** Commitment is more than an expression of support. It is achieved by investing serious time and money in the safety committee. A few examples include:

  • allowing members of the safety committee more than an hour a month to work their safety responsibilities;
  
  • promoting those who serve on safety committees because they have increased knowledge and skills in safety and health management;
  
  • responding to the recommendations made to correct conditions, practices, and systems;
  
  • through active membership in the committee; and
  
  • by attending (as observers) safety committee meetings from time to time.

### 6. How is a commitment to the safety committee different than mere support?

a. It allows committees to be composed of many employees
b. It involves attendance at meetings by managers
c. It requires serious time and money
d. It includes regular positive communication

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**How Management Encourages Volunteers**

How can management best encourage employees to volunteer to become safety committee members? Management must answer an important employee question, "what's in it for me?"

Reward members of the safety committee with tangible and intangible incentives.

- **Tangible rewards** are most commonly those that have financial value of some kind. They might consist of promotions, merit pay increases, or bonuses.

- **Intangible rewards** include public recognition and increased status. Examples might be recognition on performance appraisals, accreditation as a safety professional, or just being thanked for doing a good job.
Management can let it be known that it is to an employee's advantage for career advancement to gain experience on the safety committee. After all, doesn't a member of the safety committee gain additional professional skills in communications, meeting management, problem solving, occupational safety and health programs, hazard identification, accident investigation, recommendation writing, and other areas?

That's quite a list. Consequently, safety committee membership should make an employee more qualified for advancement. Think of involvement in the safety committee as part of a "management apprenticeship" program.

7. Which of the following is an example of a tangible reward that might be important to safety committee members?
   a. Remarks in a performance appraisal
   b. A merit pay increase
   c. Increased status among employees
   d. Recognition by supervisor

Proactive Recognition Programs

Here are a few ideas for developing a proactive safety recognition program rewarding and recognizing performance to prevent injuries in your company:

**Safety Buck:** Supervisors carry safety bucks, and when they see employees doing something right, they reward them. Employees can take the safety buck to the company cafeteria for lunch, or they can use it at a local participating store to purchase items.

**Bonus Program:** When employees identify a hazard in the workplace that could cause serious physical harm or a fatality, they are rewarded with a bonus check. In some cases, the bonus check is a fixed amount. In other programs the bonus check is a very small percentage of the potential direct cost for the accident that might have occurred.

**Safety Hero:** After an extended period of time, employees are rewarded with a certificate, a day off, a gift card, or bonus for reporting hazards, making suggestions, or involvement in safety activities.

**Reporting Injuries:** Wait a minute: Do we really mean that employees should be recognized for reporting injuries? Absolutely. If employees report injuries immediately, they not only minimize the physical/psychological impact of the injury on themselves, but they also reduce the direct/indirect accident costs to the company. Both the individual and the company win if the employee reports injuries immediately.
Exception

Days Without an Accident: We do not consider this program effective because it promotes reactive - after the fact - behaviors: failing to report accidents and injuries. Actually, the "Days without an accident" banner reflects "Days without a reported injury." consequently, the company may suffer from the "walking wounded syndrome" in the workplace.

These are just a sample of many ideas available. There are many other ways to recognize employees being used by companies across the country.

For more information on developing a successful recognition program, take OSHAcademy course 117 Introduction to Safety Recognition.

8. Which of the following is a "reactive" safety recognition program?

   a. Safety Hero Program
   b. Days Without an Accident Program
   c. Safety Bonus Program
   d. Safety Buck Program
Module 4: Safety Committee Education and Training

The Key to Successful Safety Committees

In the last module, we discussed ways to get people excited about joining and being involved in the safety committee. In this module, we’ll continue the theme of safety committee member professional development. Effective education and training are the keys to making the safety committee a valuable profit center in your company.

Suppose you have been a member of a safety committee whose members were not properly trained. In that case, you can appreciate the benefits of effective safety committee training.

You may be a member of a safety committee right now. Did you receive any training about your role and responsibilities as a safety committee member when you joined? Chances are you didn’t.

If you did, that’s great. New safety committee members should be properly educated, so that they understand why their new position is so important. The purpose is to affect attitudes about the safety committee and the contribution each member can make.

Safety committees that lack effective education and training, for the most part, flounder around but rarely get much done.

1. Why should new safety committee members be properly educated?
   a. They will get paid more money
   b. They understand why their role is so important
   c. For more accurate recordkeeping purposes
   d. So management knows they are committed

Training the Safety Committee

It’s important safety committee members be trained so they understand the big picture. Each member needs to know how the safety committee fits into the company's operations plan and how it can most effectively benefit the employer by helping to improve the safety management system..

Training will help each safety committee member:

- Understand and carry out their individual responsibilities;
- Understand important safety and health concepts, methods, rules;
• Improve safety communication, management, and leadership skills; and
• Improve problem solving, and recommendation submission skills.

Training will help the safety committee:

• Fulfill their mission to assist the employer;
• Improve its status within the company; and
• Have a positive impact on lowering claims costs, raising profits.

A well-trained safety committee will help the employer:

• Demonstrate effective safety leadership and management;
• Improve profitability, competitiveness, and morale; and
• Correct hazards and make system improvements in a timely manner.

2. Which of the following is a long-term benefit to the employer when the safety committee is well trained?

   a. Improved profitability, competitiveness, and morale
   b. A zero tolerance for accidents culture
   c. An aggressive safety enforcement program
   d. Reduced safety training costs

Three Key Subject Areas

For a safety committee to operate successfully, its members should be educated and trained in at least four very important general topics:

• safety committee vision, mission, and structure;
• safety inspection procedures;
• hazard identification and control concepts and methods; and
• accident investigation procedures.
Training New Members

New safety committee members may not have a firm understanding of the safety committee's consultative role within the safety management system. They may not realize that one of the primary purposes of safety committees is to help employers fulfill safety accountabilities. Consequently, it important that they also be trained in the following specific topics:

- responsibilities as committee members;
- safety committee policies;
- safety committee meeting rules and guidelines, and
- how to communicate with employees.

3. In addition to training that all safety committee members receive, it's important that new committee members receive training in ______.

   a. accident investigation  
   b. how to report unsafe employees  
   c. how to effectively enforce safety rules  
   d. meeting rules and guidelines

Training Strategies for Safety Committees

You now know the subjects in which to train safety committee members, but what type of training is best, and when is the best time to conduct the training? You have several alternatives.

- **Formal classroom training**: In many cases, formal training in-house or from an external source can get a safety committee member trained quickly when needed. Classroom training is best if the class is composed of students from many different departments or companies. By the way, most adults like small group exercise as their favorite training method. On the other hand, most adults do not like lecture (boring!)

- **Computer based training (CBT)**: This form of training is growing in popularity because safety committee members can fit short training sessions on the computer into their busy schedules at work or at home.
• **Informal on-the-job training (OJT):** This is best done by first-line supervisors. Safety committee members will learn how to do things like use personal protective equipment, conduct accident investigations, and perform job hazard analysis.

• **Mini training sessions at safety committee meetings:** This is a good method to keep safety committee members up on the latest changes to OSHA standards and changes in company policy, procedures, and rules. Mini training sessions can be as short as five minutes or up to 30 minutes. However, most are in the 10-minute range, so time is available to conduct other meeting business.

4. **What classroom training method do adults usually like best?**

   a. Group exercises
   b. Lecture
   c. Online training
   d. Video presentations

**Training in Hazard Identification and Control**

To be effective, safety committee members must know basic hazard identification and control concepts and methods. We'll cover this topic briefly below. A more in-depth discussion can be found in OSHAcademy course 704 Hazard Analysis and Control.

One of the hazard identification and control duties you might have as a member of the safety committee might be conducting regular walk-around safety inspections. Safety inspections can be effective in spotting workplace hazards, but only if the people inspecting know what they're looking for and ask the right questions.

Sometimes, safety inspections consist of one person walking around and scans up and down, side to side, all over the place looking for hazards, not really knowing what to look for. Occasionally, the inspector might ask an employee if they have any "safety complaints", only to receive a quick "no" so the person can get back to work. You can imagine that such an inspection ends up a waste of the inspector's time and the employer's money.
5. Which of the following is considered a best practice when conducting safety inspections?

   a. Scan the workspace quickly
   b. Limit inspection to your own workspace
   c. Take time to ask questions as you inspect
   d. Do not inspect with others

Hierarchy of Controls

Safety committee members should be trained the ANSI/AIHA Z10:2012 Hierarchy of Controls which includes six basic strategies in controlling exposure to hazards in the workplace.

Controlling workplace hazards: The first three strategies reduce exposure by controlling hazards. If you can get rid of the hazard, you don't have to manage behaviors.

   1. Elimination - totally eliminate the hazard.
   2. Substitution - substitute a hazardous condition with a less hazardous or hazard free condition.
   3. Engineering - eliminate or reduce hazards through design and redesign.

Controlling employee behaviors: The last two strategies reduce exposure by controlling employee behaviors through the use of procedures and personal protective equipment (PPE).

   4. Warnings - attempt to reduce exposure by warning employees about hazards.
   5. Administrative controls - to protect employees through the use of safe procedures and practices.
   6. Personal protective equipment - to set up personal barriers to the hazards.

Safety professionals know all about the Hierarchy of Controls, so be sure to get trained. You may want to take Course 122, Introduction to Hazard Controls or Course 704, Hazard Analysis and Control. You may also want to attend conferences sponsored by the American Society of Safety Professionals and others to learn more about this important topic as the awareness of and compliance with their message. Warnings do not eliminate or reduce hazards.
6. Which of the following hazard control strategies eliminates or reduces hazards through design and redesign?

   a. Elimination  
   b. Engineering controls  
   c. Substitution  
   d. Administrative controls

Get Trained on Accident Investigation Procedures

In some companies, safety committees are assigned the responsibility to review and evaluate accident reports. Consequently, it's important that safety committee members understand effective accident investigation procedures and what good accident reports look like.

The Six-Step Accident Investigation Procedure

One effective process for conducting accident investigations includes six steps to assess, analyze, and evaluate facts to develop permanent corrective actions. The six steps are:

   Step 1: Secure the accident scene to ensure material evidence is not moved.  
   Step 2: Gather data and information using observation, interviews, photos, sketches, etc.  
   Step 3: Develop the sequence of events prior to, during and immediately after the accident.  
   Step 4: Analyze each event for surface and root causes that contributed to the event.  
   Step 5: Develop recommendations for immediate and long-term corrective actions.  
   Step 6: Write the accident report that includes findings and recommendations. Do not include fault-finding accusations.

You'll find more about this topic in OSHAcademy course 702 Effective Accident Investigation.
7. What is the purpose of assessing, analyzing, and evaluating facts during an accident investigation?

   a. To address the surface causes of accidents
   b. To develop permanent corrective actions
   c. To determine employee liability
   d. To reduce the likelihood of an OSHA investigation
Module 5: Hazard Identification and Analysis Tools

Right Tools for the Job

Now let’s look at some of the tools safety committees can use to identify hazards and determine how to correct those hazards.

Workplace Accidents

Earlier, we talked about the importance of understanding the nature of workplace hazards that are manifested primarily as hazardous conditions, unsafe behaviors, and ineffective administrative controls. We need to understand which of the cause categories below result in the most accidents:

1. **Conditions.** Hazardous conditions account for very few workplace accidents. Yet, most of the time we look primarily for unsafe conditions when conducting a walk-around safety inspection. OSHA compliance inspections are geared toward discovering unsafe conditions, so it’s no wonder that employer inspections focus on the same thing. Consequently, your company might conduct a safety inspection on Tuesday and have a fatality on Wednesday due to an unsafe work practice not discovered earlier. Therefore, our attention during safety inspections must be on both hazardous conditions and unsafe behaviors.

2. **Behaviors.** Unsafe work practices and behaviors directly account for more accidents than hazardous conditions. But what are the factors that contribute to the hazardous conditions and unsafe behaviors? What is the "ultimate cause" for most accidents?

3. **Systems.** Safety management system failures are inadequate or nonexistent safety principles, policies, programs, plans, processes, procedures, and practices. These system component "root-cause" failures contribute to virtually all of the hazardous conditions and unsafe behaviors that cause accidents. Therefore, the only assumption we should make when an accident occurs is that the safety management system has failed somehow. Our job is to discover and correct those failures.

There are a few situations when the safety management system is working and should not be judged as the root cause for an accident:

- the accident results when the employee makes an informed decision to intentionally violate a safety rule;
- the accident is what is termed an "act of God" (lightning, etc.); or
the accident is the result of an illness/disease which is unknown by the employee and not observable by management.

1. Virtually all accidents in the workplace are the result of _____.
   
   a. lack of common sense and good judgment  
   b. safety management system failures  
   c. hazardous conditions  
   d. intentional unsafe behaviors

**OSHA Citations**

When OSHA investigates accidents, they generally write citations addressing four general violation categories.

- **Inadequate supervision**: The employer fails to adequately supervise employees.
- **Inadequate education/training**: The employer fails to adequately train employees.
- **Inadequate accountability**: The employer fails to enforce compliance with safety rules and policies.
- **Inadequate resources**: The employer fails to provide adequate resources such as tools, equipment, facilities.

According to OSHA fatality accident investigation reports, most injuries occur in these four citation categories. Consequently, safety committees need to look at them as the "Big 4" system weaknesses and focus on them in safety inspections and accident analyses.

Effective safety management is an organizational skill. It does not allow system weaknesses to exist in the workplace. The employer can develop safety management systems that address the vast majority of hazardous conditions and unsafe work practices. There is always a way to fix the system to reduce hazards and exposures to an acceptable level.
2. Which of the following is one of the four general OSHA citation categories that result from fatal investigations?

   a. Inadequate recordkeeping
   b. Inadequate accountability
   c. Inadequate rewards and recognition
   d. Inadequate discipline

Hazardous Conditions

A hazardous condition may be thought of as a "state of being" that exists. All workplaces contain hazardous conditions in any one or more of the five categories below. It is easy to remember the categories by using the "MEEPS" acronym:

1. **Materials**: Any material such as chemicals, wood, metals, fibers, and plastics may present hazards.

2. **Environments**: Two categories of hazardous environments exist:
   - **Physical** – hazardous atmospheres, excessive noise, temperature extremes, ergonomic hazards.
   - **Psychosocial** - inadequate time, unreasonable schedules, unobtainable goals, or any form of intimidation or coercion can create a high level of anxiety, distress leading to illness.

3. **Equipment**: Defective tools, unguarded equipment, complex machinery. Anything that moves is hazardous.

4. **People**: Lack of knowledge, skills, or abilities represent hazardous states of being. A poorly trained worker, physical weakness, limited cognitive ability, distraction, or any kind of stress, etc., can all create "walking hazardous conditions."

5. **System**: Poorly designed and deployed programs, policies, plans, processes, procedures, and practices are ultimately the conditions that cause most accidents.
3. Which of the following is considered a hazardous condition?

a. An employee is driving a while distracted
b. A worker is standing on top of a ladder
c. A supervisor is suffering from heat stress
d. Employees are engaging in horseplay

Unsafe and Inappropriate Behaviors

Simply put, unsafe behaviors are what we do or don't do that result in an injury or illness. These include work procedures that increase the likelihood of an injury.

Unsafe employee and management behaviors represent, by far, the highest percentage of surface causes for accidents in the workplace.

- The longer employees are exposed to hazards, the more they will naturally become more likely to trivialize the dangers those hazards pose.
- Most unsafe behaviors occur because employees are likely in a hurry.
- Employees may also want to take shortcuts to be efficient or because don't realize the dangers.
- Most of the time, employees don't comply with safety rules because they don't know why they are important.
- When supervisors and managers properly train, supervise, and provide resources, and set a good example, they exhibit real safety leadership. But, when they fail to do that, they fail their employees.

Unsafe Employee Behaviors

Employees make choices about safety each day: They may choose to work safely or ignore safety. They do what they do in the workplace because of the consequences they think will follow.

Employees may work within a safety culture that expects and insists on high safety behavioral standards. On the other hand, some employees may work within a culture that actually encourages unsafe behaviors. Ultimately, employee behaviors in the workplace depend on the safety culture (leadership) and safety system design (management).
In a worst-case scenario, employees may work within a culture that actually encourages unsafe behaviors. On the other hand, they may work within a safety culture that expects and insists on high standards of safety behavior. Ultimately, employee behaviors in the workplace depend on the safety culture (leadership) and safety system design (management).

4. Employees don’t comply with safety rules most often because _____.
   a. they are worried about not meeting work schedules
   b. they don’t know why it is important
   c. they think they will be more efficient doing it their way
   d. they lack the proper knowledge and skills to work safe

Inappropriate Management Behaviors

Safety is too important for supervisors and managers to merely "encourage." They must display and insist on safe behaviors that produce safe conditions. Failure to do so may produce unsafe employee behaviors and hazardous conditions throughout all levels of the organization. As a manager’s position and responsibility increases, the impact of their behavior increases as well.

Examples of unsafe management-level decisions and behaviors include:

- **Managers unintentionally create hazards or exhibit unsafe behaviors.** This is the most common reason management-level hazardous conditions and unsafe behaviors exist. Inadequate education and training, unreasonable workloads or other pressures may prevent top management from formulating adequate safety systems, middle management from implementing them, and supervisors from overseeing the implementation daily.

- **Managers intentionally create hazards or exhibit unsafe behaviors.** We want to think this never happens, but the truth is, it does. Thankfully, it's probably quite rare. Intentional unsafe behaviors usually take the form of "ignoring" established safety policies and rules. A more serious situation arises when a supervisor or manager directs employees to perform actions that create a hazard or exposes the employee to an existing hazard without proper protection.

The solution to both types of management-level behavior failures is to educate supervisors, managers, and executives on the importance of safety and demonstrating safety leadership.
5. What is the most common reason management-level hazardous conditions exist?

a. Managers intentionally create hazards or exhibit unsafe behaviors
b. Managers expect employees to exhibit unsafe behaviors
c. Managers unintentionally create hazards or exhibit unsafe behaviors
d. Managers don’t feel responsible for safety

Safety Management Systems

Every company has a formal or informal safety management system (SMS) to ensure their workplace is safe and healthful. Ultimately, SMS design and performance represent the root causes of the safety culture’s success or failure.

Typical components of an effective SMS include:

- **Vision statement**: Vision statements tell the world what the company would like to have accomplished in the future. A vision statement is based on an organization's strategic and organizational objectives.

- **Mission statement**: Mission statements tell the world why the company is in business. Its purpose. What it does.

- **Objectives**: These describe the intended outcomes that support the mission and vision.

- **Policies**: Policies provide general guidance formulated and implemented by managers at all levels. It allows employees to make decisions without having to ask permission.

- **Programs**: Programs focus on specific topics like confined space, training, and accountability. They describe coordinated strategies that support policy.

- **Plans**: Give clear written (formal) guidelines on how to implement programs and policies. They include long-term strategies and short-term tactics.

- **Processes**: Process usually includes several procedures, and they may be very complicated. They help to make sure safety is integrated into operational processes.

- **Procedures**: These are concise formal/informal step-by-step instructions about how to perform a task.

- **Budgets**: Budgets support investment in all of the above.
• **Rules:** Rules are very specific and clearly state specifications and performance standards.

• **Reports:** Reports provide useful data that helps to improve safety. They reflect process and measures results. They evaluate the effectiveness of all the above.

Bottom line: Safety management systems must be designed and deployed effectively or the results will be flawed. If system design is flawed, it doesn't matter how effective deployment is; the result will not be what was intended.

6. What is listed as the most effective hazard control strategy in creating a safe and healthful workplace?

   a. Get management funding
   b. Fixing the system
   c. Firing unsafe employees
   d. Oversee workplace compliance

Two Important Tools to Identify Hazards

Your ability to identify hazardous conditions and unsafe work practices can be very effective if you are given the correct tools. We'll talk about two such tools below.

The Safety Inspection...an Effective Tool

The first important tool is rather obvious: It's the safety inspection or audit. Three important points should be remembered when conducting the safety inspection:

• **Know what you are doing.** Only trained individuals should conduct safety inspections. They should be aware of the different types of hazards in the workplace. Unsafe materials, tools, equipment, workstation design, noise, atmospheres, temperature extremes, and work practices should be evaluated. The inspector should know what to look for and how to look for it. Get trained.

• **Allow enough time to conduct a thorough inspection.** The more time you give to complete the safety inspection, the more likely you'll uncover that hazard waiting to injure someone. A short inspection conducted once a quarter by an untrained safety committee member or supervisor may not be worth the time spent conducting it.

• **Use a checklist.**
Safety Inspection Checklist

- **Advantages:** Checklists, when properly constructed help you inspect for hazardous conditions and unsafe work procedures in a structured, systematic manner. If a checklist is not used, it’s more likely that quality will suffer over time. Without a checklist, the conduct of the inspection will vary widely from person to person, depending on their expertise.

- **Disadvantages:** Simply put, checklists take time to construct: time you may not have. But the long-term advantages far outweigh the short-term effort. A second disadvantage is that using a checklist might cause the dreaded "tunnel vision" syndrome when an inspector overlooks a hazard in the workplace because it was not addressed in the checklist. The cure for this common disease is to merely place a "catch-all" question into the checklist that asks if there are any other hazards that need to be corrected.

7. How do you overcome "tunnel vision" while conducting a safety inspection?

   a. Put a "catch-all" question in the checklist
   b. Stay focused in one area at a time
   c. Use the "rolling-eyeball" method
   d. Don't try to find all hazards

The Job Hazard Analysis

The Job Hazard Analysis or "JHA" is a less used procedure to identify and control hazards in the workplace, but it is considered far more effective in reducing injuries and illnesses. The JHA procedures go something like this:

1. The supervisor and employee get together and talk about doing a JHA.

2. The employee works through about five or more cycles of a task.

3. The supervisor records what the employee does.

4. The supervisor and employee break the job down into distinct steps.

5. They analyze each step for hazardous conditions and practices.

6. They think up ways to correct the hazards in each step.

7. They devise ways to work safely in each step.
8. They write an improved safe work procedure for the job.

The JHA is far more effective than the walk-around inspection because it systematically identifies hazardous work conditions and unsafe work practices. The safety inspector conducting a traditional safety inspection may not take the time necessary to watch every job being performed in the area he or she inspects. Consequently, many unsafe work procedures are not discovered. The Job Hazard Analysis does require the time necessary to uncover unsafe work practices and procedures.

8. Why is the JHA considered superior to the safety inspection in reducing workplace injuries and illnesses?

   a. The JHA establishes non-accountability at all levels
   b. The JHA analyzes unsafe conditions, behaviors, and practices
   c. The JHA takes less time than an inspection
   d. The JHA takes less training than an inspection

The OSHA 300 Log

What, you may ask, is the OSHA 300 Log? The OSHA 300 Log is probably one of the best statistical tools you have to uncover long-term hazardous conditions and unsafe behaviors.

Look at each column of your company's OSHA 300 Log and ask "Who-What-Where-When-How" questions about each entry. Take the information you gain from this analysis to draw conclusions about where your greatest effort needs to be directed. For instance, most lost workday claims are due to strains and sprains. Your OSHA 300 Log may reflect this trend. At any rate, analyzing the OSHA 300 Log allows you to act on facts, not hunches.

Think about this too: When an OSHA compliance officer comes to inspect, he or she will always review your OSHA 300 Log. The Log will tell the OSHA compliance officer exactly where accidents are occurring and what kind of injuries and illnesses are happening. At that point the compliance officer knows where to put emphasis in the inspection. Make sure all hazards identified on the OSHA 300 Log are corrected! You can learn more about OSHA recordkeeping in OSHAcademy course 708 OSHA Recordkeeping Basics.
9. The OSHA 300 log is a statistical tool that helps to directly uncover long-term _____.

   a. root causes of accidents
   b. who is at fault for accidents
   c. hazardous conditions and unsafe behaviors
   d. how to correct hazards that caused injuries
Module 6: Problem Solving Techniques

As a safety professional, you are or will be engaged in the process of solving safety management system problems for your employer or client. It's important to have a general understanding of the basic steps involved in acquiring adequate skills. This module will look at the basic steps in problem-solving and some proven techniques to efficiently and effectively solve your organization's safety management system challenges.

Solving Safety Problems

Solving safety-related problems centers around two key strategies:

- **Solving surface-cause problems.** Eliminating/reducing unique hazardous conditions and unsafe work behaviors representing the surface causes of accidents.

- **Solving root-cause problems.** Improving inadequate or missing safety and health programs, policies, plans, processes, procedures, and practices representing the root causes that contribute to hazardous conditions and unsafe behaviors.

1. Solving safety-related problems centers around which two key strategies?
   a. Solving surface-cause and root-cause problems
   b. Reporting hazards and behavior problems to management
   c. Having a zero-tolerance and total commitment approach
   d. Removing affected workers and controlling hazards

The Problem-Solving Process

As with any process, there are several required steps involved to ensure a successful outcome. Let's examine five steps that every problem-solving task should involve.

**Step 1: Understand the Problem**

- **Describe the observable/measurable conditions and behaviors.** They represent the "signs and symptoms." of the problem.

- **Determine the nature of the problem.** For example, the problem may involve inadequate leadership, poor management, or defective equipment.

- **Determine the scope of the problem.** Does it affect individuals, groups, departments, the facility, the company, or the industry?
• **Write a descriptive problem statement.** Problem statements should be operational. That is, they should be expressed using measurable/observable terms. For example; "There has been a 50% increase in the number of strain/sprain injuries in the warehouse over the last six months." The group must reach a consensus on the problem statement.

• **Determine priorities.** If more than one problem exists, which one should we solve first? It's important that the group, not an individual, determine the most important problem to work on.

**Step 2: Discover the Cause(s)**

• **Analyze the problem.** Break the problem down into component parts. Some simple techniques: Circle key words. Accident investigation - Develop a sequence of steps.

• **Ask questions.** Ask who, what, where, why, when, and how, to get to the source or root cause of the problem.

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2. Which of the following is a descriptive problem statement?

   a. We have seen a number of OSHA violations
   b. We must reduce the number of injuries this year
   c. Unsafe behaviors are occurring due to lack of common sense
   d. We have had a 50% increase in the number of injuries this year

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**Step 3: Target Solutions**

**Develop specific primary and alternative solution strategies.** Focus on elimination/substitution, engineering controls, administrative controls, or personal protective equipment to correct corrective actions.

**Focus on improving the system.** Revise written programs, policies, plans, processes, procedures, and practices to improve the safety management system.

**Determine resources and responsibilities.** Physical and human resources will be required for most corrective actions and system improvements.

**Design specific primary and alternative solutions.** Developing alternative corrective actions and system improvements will give management choices and a feeling of control over the outcome.
Establish appropriate timelines. The sooner, the better, of course, but it may be impossible to correct or improve immediately in some instances. Generally, you might promote the following schedule: Serious impact - immediate or as soon as possible. Minor impact - within 30 days.

Step 4: Sell the Solution

What is an effective recommendation? You'll learn more about submitting a recommendation that "sells the fix" in the next module. When recommendations are not acted upon it may be because the supervisor does not have enough information to decide and therefore doesn't act right away.

To speed up the process and improve the approval rate, the presenter should anticipate the supervisor's questions. The more pertinent the information you give, the higher the odds are for approval.

3. Why should you develop alternative solutions when proposing recommendations?
   a. Alternatives give management choices
   b. Alternatives make your solutions look good
   c. Alternatives give you the control, not management
   d. Alternative solutions are always better

Step 5: Implement the Solution

Your work in problem solving is not done once you have gained agreement on the solution. In fact, your problem(s) may just be starting.

Implementing solutions to safety management system problems requires an understanding of change and transition.

- **Change.** Change is external. Change may involve a new boss, new procedures, or new products. The change will not succeed unless each affected employee transitions internally.

- **Transition.** Transition originates within each affected employee. It's a psychological process of adapting to externally imposed change. It involves changes in thinking, beliefs, behavior, and performance.

According to William Bridges, *Managing Transitions*, there are three phases of transition that all employees must complete before successful change can occur:
Phase One - Letting go. Ending the old order. Unfreeze old behavior. Acceptance.


4. Which of the following terms is defined as a psychological process of adapting to externally imposed change?
   a. Change
   b. Transition
   c. Projection
   d. Rejection

Applying the Techniques

Developing solutions to surface cause problems may occasionally require different tools and techniques than those required to solve root cause problems. So, let's review the problem-solving tools and techniques that help address surface causes and then shift gears to discuss problem-solving for root causes.

But first, let's look at the following scenario and use it as the context within which we will discuss problem solving in each of the two areas. Read the following accident scenario and then reference it to answer the questions that follow:
Scenario

Bob was a new hire employee working as a clean-up person in the finish department of XYZ, Inc's particle board plant.

On his first day of work, he received an initial classroom orientation on company policies from the personnel department.

He was also introduced to his new supervisor who gave him a walk-around tour of the plant.

Since his supervisor was quite busy and didn't have time to fully brief Bob on his new job, he was then given some simple initial duties to accomplish.

He was busy cleaning up around the floor under the return belt of a conveyor connected to a large piece of machinery.

He removed a guard covering pinch points on the conveyor and reached into the area to remove the piece of wood.

Bob’s glove became caught in the return drum nip point, and he was drawn into the machinery.

Luckily, Bob was eventually able to pull himself out of the machinery before being injured.

XYZ, Inc. has a mod rate of 1.5. Unfortunately, this incident was not a total surprise to the company. Most of their OSHA 300 Log recordable accidents have been the result of injuries to employees within their first six months on the job.

What's a MOD rate? The experience modification rate (mod) compares an establishment’s workers’ compensation claims experience to other employers of similar size operating in the same type of business. The mod rate reflects a company's safety record and affects its insurance premium.

- If the mod rate is higher than 1.0, the employer’s experience is worse than expected and insurance premiums will be higher than the average for companies within the industry.
- If the mod rate is below 1.0, the employer’s experience is better than expected and insurance premiums will be lower than average for companies in the industry.

Watch the NCCI video above to get more information on MOD Rates. Just remember, your goal is to get that mod rate below 1.0!
5. What does a company's experience modification rate (MOD Rate) of 1.5 indicate?

   a. The company's workers' compensation claims experience is better than average
   b. The company's accident frequency record is higher than normal
   c. The company's workers' compensation claims experience is worse than average
   d. The company's injury severity record is worse than normal

Getting to the Facts: Five-Why Analysis

This traditional analysis technique is primarily used in accident investigation to determine the accident's surface cause(s). Surface causes are the unique conditions and behaviors that contributed to or caused the accident.

The technique simply asks a series of initial who-what-where-when-how questions to determine the basic facts. The questions that ask who, what, and how are the most important to discover the surface causes of accidents. When used with the 5-Why analysis we'll discuss in the next section, you'll be able to identify root causes.

• **Who** is getting hurt? Are individuals or groups getting hurt over and over, and is it the same kind of injury?
  
  o Are only new employees getting hurt?
  
  o Are forklift and truck drivers having accidents?
  
  o Are most of the accidents happening to our younger or older workers?
  
  o Is there an obvious trend that tells who is getting hurt?

• **What** actually caused the injuries? This question looks for the basic cause of the physical trauma to the body. This might be best answered determining trends in the following accident types:
  
  o **Struck by**: A person is forcefully struck by an object. The force of the Contact is provided by the object. Example: Struck by a falling object.
  
  o **Struck against**: A person forcefully strikes an object. The person provides the force or energy. Example: Running up against a wall.
  
  o **Fall from elevation**: A person slips or trips and falls to a level below the one he or she was walking or standing on. Example: Fall over edge while shingling roof.
o **Fall to surface:** A person slips or trips and falls to the surface he or she is working or standing on. Example: fall due to slippery floor.

o **Contact with:** A person contacts a harmful substance or material. The person initiates the contact. Example: Contacting electricity.

o **Contact by:** Contact by a substance or material that, by its very nature, is harmful and causes injury or illness. Example: Acid splashes on a person's face.

o **Caught on:** A person is somehow caught on an object that is either moving or stationary. This may cause the person to lose his or her balance and fall, be pulled into a machine, or suffer other harm. Example: A person is dragged into a machine because loose clothing is caught on a conveyor belt.

o **Caught in:** A person is trapped or otherwise caught in an opening or enclosure. Example: A person's arm is stuck in a printing machine when it starts up and causes injury.

o **Caught between:** A person is crushed, pinched, or otherwise caught between a moving and a stationary object, or between two moving objects. Example: Person is crushed between moving crane and wall.

o **Bodily reaction:** Caused solely from stress imposed by free movement of the body or assumption of a standard or unnatural body position. Example: Person bends over to plug in a tool and strains back.

o **Over-exertion:** A person over-extends or strains beyond ability to lift, lower, push, pull an object. Example: Person strains back while lifting a box.

o **Over-exposure:** Over a period of time, a person is exposed to harmful energy, such as noise, heat, toxic chemicals, or hazardous atmospheres. Example: Person loses consciousness due to lack of oxygen.

**Where are workers getting hurt?**

o Are they getting hurt while doing their regular job, or are they working for another department when they get hurt?

o Are workers getting injured more in certain departments or workplace areas, like the maintenance shop or on towers?
- Are workers only involved in accidents in particular facility locations, like the warehouse, high traffic areas, or the parking lot?

- **When** are workers getting hurt? Look for trends in:
  - A particular time of the day. Early or late in the work shift?
  - A particular day of the week. Mondays? Fridays?
  - A particular week of the month. Just before payday? Last production week?
  - A particular month of the year. December?
  - A particular quarter of the year. Last fiscal quarter?
  - A particular season of the year. Just before hunting season?
  - A particular business cycle. Just before annual report?

- **How** was the worker injured? This question is directed toward hazardous conditions and unsafe work practices?
  - Were hazardous materials, tools, equipment, being used?
  - What was the worker not using: personal protective equipment?
  - Are work shifts too long?
  - Were workers using unsafe practices? Are workers getting hurt as a result of factors within or outside of work: factors the employer controls, or can't control?

- **Why** did the above occur? Did someone do something or create a hazardous condition that indirectly resulted in the conditions and behaviors you arrived at above?
  - Why...? Is there inadequate or missing training, supervision, accountability?
  - Why...? Is there an inadequate or missing procedure?
  - Why...? Is there an inadequate or missing policy?
  - Why...? Is there an inadequate or missing program?
  - Why...? Is there an inadequate or missing procedure?

As you can see, the first set of questions get at the surface cause(s) for the accident. Once we know what directly caused the injury or illness, we begin to ask why to arrive at root causes. Each time a why question is asked, a deeper root cause is uncovered.
6. Which of the following is an example of over-exertion?

   a. A person strains his shoulder when trying to lift a heavy object
   b. A person loses consciousness due to a lack of oxygen
   c. A person bends over to plug in a tool and gets dizzy
   d. A person is splashed by acid on the face

**Getting the Facts: 5-Why Analysis**

This technique is used once you have asked the who-what-where-when-how questions we discussed in the previous section. In this technique, we list each of our analysis findings, and then we continue by asking "why" at least five times for each of the findings. Doing this will help us eventually arrive at one or more root causes contributing to the accident.

Let's apply the who-what-where-when-how analysis technique to an accident summary statement to determine surface causes and then use the 5-Why analysis to determine the accident's root causes.

Finding: Bob, a new hire in the finish department, was injured as he attempted to remove a jammed piece of wood from a conveyor belt under a large piece of equipment.


Why? Bob was the only worker available to do the job.
Why? The shift was understaffed.
Why? Management has reduced staffing.
Why? Sales have decreased in the last two quarters.

What was he doing? Removing a piece of wood jammed in a conveyor belt.

Why? Bob thought it was his job, and his supervisor expected it.
Why? Bob was not properly trained or briefed by the supervisor.
Why? The supervisor did not train or properly brief Bob.
Why? The company does not have electrical safety training, machine guarding safety, or lockout/tagout procedures.

Why? The company does not have a formal safety training program.
Where did the accident happen? Within energized equipment in the finish department.

Why? The wood had jammed the conveyor within the energized equipment.
Why? The wood had slipped through the side of the belt into the pulley system.
Why? The conveyor system does not have adequate guarding along the length of the system.
Why? The conveyor system is has been used for 40 years and did not have proper guarding when purchased.

Why? Guards were not mandated by standards when purchased.

When did the accident happen? At 3:00 am on the mid-shift.

Why? That is when the wood became lodged in the conveyor system.
Why? The equipment was not being monitored during the mid-shift.
Why? The mid shift was understaffed.
Why? The company has difficulty hiring workers for the mid-shift.

Why? Employees receive no incentives for working the mid-shift.

How did he get hurt? His hand was caught and pinched by an incoming nip point on the moving conveyor.

Why? The conveyor was in operation when Bob attempted to remove the wood.
Why? Bob did not perform lockout/tagout before removing the guard and reaching into the conveyor belt area.
Why? Bob did not realize he needed to deenergize the equipment before removing the wood.
Why? Bob did not receive machine guarding, electrical safety, or lockout/tagout training.

Why? The supervisor did not ensure Bob received proper training before the assignment.

As you can see, the first set of questions get at the surface causes for the accident. Once we know what directly caused the injury or illness, we begin to ask why to arrive at the root causes. Remember, each time a why-question is asked, a deeper root cause is uncovered. To get to the deep root causes, ask why at least five times.
7. What is the purpose of the 5-Why analysis?

a. To properly identify those at fault
b. To discover the surface causes
c. To determine the root causes
d. To comply with OSHA requirements

**Mind Mapping**

Mind Mapping, or "Instantaneous non-linear cognitive deduction utilizing spatial forms in a two-dimensional plane." (huh?) Seriously, mind mapping is merely drawing circles and lines to help you quickly think about and categorize ideas, problems, concepts, subjects, and just about anything else. Mind mapping is successful because it takes advantage of the brain's natural ability to categorize ideas in a rapid, but rather unorganized manner.

Look at the mind map to the right. At the center we write the problem. Next, think of the factors that are more obvious causes for the problem. This works best by letting your subconscious do the work while you watch TV or work on another project. Next, take a look at each factor listed and ask why the cause exists.

Using this technique, you will be able to take any topic, project, or problem and quickly determine related categories of processes, procedures, topics or events.

Once the mind map is complete, it is merely a matter of reorganizing the information into the more common "outline" format.

**Fishbone Diagram**

Another tool similar to the mind map is called the Fishbone Diagram or "Cause and Effect Diagram. Basically, it's just a mind map using a different form. The diagram below illustrates this. The "Effect" describes the problem. Possible causes are listed in one of several categories.
that you determine. Generally, these categories might be people, materials, equipment, environment, methods, or procedures.

8. In the fishbone diagram above, the head of the fish represents the effect, and the bones represent the _______.
   a. possible solutions of the effect
   b. possible causes of the effect
   c. factors that identify the effect
   d. factors that prevent the effect

**Brainstorming**

You are probably familiar with this problem-solving technique. Brainstorming can be used by individuals or groups quite successfully to quickly develop a list of possible solutions to problems. There are six basic and unalterable rules to the group process of brainstorming that set it apart from other problem-solving procedures. They are:
• **Define the issue.** Make sure everyone is clear on the problem you are going to brainstorm.

• **Critical non-judgment.** Defer judgment on any idea that is expressed. This even includes encouraging comments to others or qualifying phrases attached to your own suggestions.

• **Organized chaos.** The session should be as freewheeling as possible, with each person voicing whatever ideas come to mind - no holds barred. Ideas may be expressed in rapid, machine-gun, fashion. Don't limit the creativity.

• **Similar originality.** Participants are encouraged to hitchhike or piggyback on the ideas of others. When one person's suggestion sparks an idea by another, it should be instantly expressed. Lots of "ah-ha's"...

• **Quantity, not quality.** The more ideas the better. The goal of brainstorming is to get as many ideas as possible. Evaluation and elimination can be accomplished later.

• **Brief summary statements.** Don't go into great detailed explanations of your idea. You want the recorder to be able to have time to write down all ideas as team members think of them.

9. Which of the following is NOT one of the six primary rules of brainstorming?

   a. Clearly state the problem
   b. Go for quality, not quantity
   c. Defer judgment on ideas
   d. Piggyback of the ideas of others

**Perception is Reality**

The survey is an excellent problem-solving tool to help identify the perceptions of many employees. What they perceive is their reality, so it's important to understand what they think. Safety committees and coordinators can gain valuable information about the safety management system with this technique. To help ensure the survey is effective, do the following:

   1. **Gather a team.** Best if led by trained employees.
2. **Determine who you are going to sample.** All departments should be represented. Randomly select from three groups: managers, supervisors, employees.

3. **Decide how you are going to do the survey.** Keep it simple and confidential. Use computer software or manual system.

4. **Tell everyone why you are going to have a survey.** This is a critical step. Explain clearly. Express the importance of the survey. Explain who is involved, what the survey is about, how it is being administered, and especially why it's important.

5. **Conduct the survey.** The key to high participation is a quick response. Honor confidentiality and reward participation.

6. **Summarize the results.** What are the perceptions of each of the three groups: managers, supervisors, employees?

7. **Meet directly with the top decision-maker to discuss the results.** This helps reduce misunderstanding and is more likely to get top management buy-in. It also bypasses gatekeepers who might revise the results or prevent the results from being heard.

We've discussed a sampling of some common problem-solving techniques, but there are many others available that can help you and the safety committee quickly arrive at solutions to apparently complicated problems that might surface. We want to encourage you to continue to explore all available methods.

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**10. Why is it important to discuss the results of a survey with the top decision-maker?**

- a. Increase personal power
- b. Less likely to get top management support
- c. Takes less time to get results
- d. Bypass the gatekeepers who might revise results
Module 7: Developing Effective Recommendations

Convincing Management

Once you have developed effective engineering and administrative controls, the challenge becomes convincing management to make changes. Management will most likely understand the importance of taking corrective action and readily agree with your ideas.

However, if management doesn't understand the benefits, success becomes less likely. Your ability to present effective recommendations becomes all that more important.

This module will help you learn how to put together "an offer they can't refuse" by emphasizing the corrective action's long-term bottom-line benefits.

Why Decision-makers Don't Respond Quickly

When recommendations are not acted upon, it is usually because the decision-maker does not have enough information to decide. To speed up the process and improve the approval rate, you must anticipate the questions decision-makers will ask. The more pertinent the information included in the presentation is, the higher the odds are for approval.

1. Why do decision-makers fail sometimes to act on safety committee recommendations?
   a. They think it will cost too much
   b. They're too busy to bother with safety
   c. They don't really care about safety
   d. They don't have enough information

Six Key Questions

Let's look again at the scenario introduced in Module 6. We're going to use this scenario to make some effective recommendations for corrective action. We want to make sure this accident never happens to Bob (or anyone else) again. You'll do this by reviewing the accident scenario and answering six key questions.

With the information gained, you will conclude the investigation by writing a recommendation. Your job is to convince me (your supervisor) that your ideas make sense... and I'm busy, so make it good!
Scenario

Bob was a new hire employee working as a clean-up person in the finish department of XYZ, Inc's particle board plant.

On his first day of work, he received an initial classroom orientation on company policies from the personnel department.

He was also introduced to his new supervisor who gave him a walk-around tour of the plant.

Since his supervisor was quite busy and didn’t have time to fully brief Bob on his new job, he was then given some simple initial duties to accomplish.

He was busy cleaning up around the floor under the return belt of a conveyor connected to a large piece of machinery.

He removed a guard covering pinch points on the conveyor and reached into the area to remove the piece of wood.

Bob’s glove became caught in the return drum nip point, and he was drawn into the machinery.

Luckily, Bob was eventually able to pull himself out of the machinery before being injured.

XYZ, Inc. has a mod rate of 1.5. Unfortunately, this incident was not a total surprise to the company. Most of their OSHA 300 Log recordable accidents have been the result of injuries to employees within their first six months on the job.

Six Key Questions

Answer the following six questions to help develop and justify recommendations.

1. **What exactly is the problem?**

   - **Surface causes:** What are the specific hazardous conditions and unsafe work practices that caused the problem?

   - **Root causes:** What are system components - the inadequate design or implementation of safety management programs, policies, plans, processes, procedures and general practices that allowed the conditions and behaviors to exist?
2. Reaching into an unguarded conveyor belt would be described as _____ of the injury in an accident report.
   a. an indirect cause
   b. a root cause
   c. an unsafe result
   d. a surface cause

2. What is the history of the problem?

Have similar accidents occurred previously? If so, you should be able to claim that the probability for similar accidents is highly likely to certain. What are previous direct and indirect costs for similar accidents? How have similar accidents affected production and morale?

   • Describe how it has affected direct, budgeted or insured costs related to past injuries or illnesses.

   • How has it affected costs (indirect, unbudgeted or uninsured) related to loss of efficiency and employee morale?

3. What are the solutions that would correct the problem?

What are the specific engineering, administrative, and PPE controls that, when applied, will eliminate or at least reduce exposure to hazardous conditions? What are the specific system improvements needed to ensure a long term fix?

The recommendation. For this scenario, assume the safety committee recommends developing a new safety training program for maintenance employees and supervisors. The program includes electrical safety, machine guarding safety, and the control of hazardous energy (lockout/tagout) training. It will also include the training for an in-house trainer. The estimated investment for the recommendation is $10,000.

4. Who is the decision-maker?

Who is the decision-maker: the person who can approve, authorize, and act on the corrective measures? What are the possible objections that he/she might have? What are the arguments that will be most effective in overcoming objections?
3. Who should most appropriately receive your recommendations for corrective action?

a. The safety committee chairperson  
b. The safety director  
c. The decision-maker  
d. OSHA

5. What motivates the decision-maker?

It's important to know what is motivating the decision-maker. Is the decision-maker involved in safety to fulfill one or more of the following imperatives?

**Fulfill the legal obligation?** You may need to emphasize possible penalties if corrections are not made. Common in a fear-driven culture.

- **Fulfill the financial obligation?** You may want to emphasize the costs/benefits. Common in an achievement-driven culture.

- **Fulfill the social obligation?** You may want to emphasize improved morale, public relations. Common in a humane corporate culture.

Employer motivation will determine the nature of the objections to the recommendations you submit. What are possible objections the decision-maker might raise? Whatever they might be, it's important you understand their motivations so that you are better prepared with responses that satisfy the decision-maker's needs.

- List the possible decision-maker objections.

- List the arguments that are most likely to be successful against those objections.

- As a last resort: Review employer obligations under administrative law.

4. Which employer safety obligation emphasizes the costs and benefits of safety?

a. The legal obligation  
b. The financial obligation  
c. The social obligation  
d. The employee obligation
6. What will be the cost/benefits of corrective actions and system improvements?

- What are the costs that might result if/when OSHA inspects? Answer this question to address the legal obligation your employer has.

- What is the estimated investment required to take corrective action, and how does that contrast with the possible costs if corrective actions are not taken? Answer this question to address the fiscal obligation your employer has.

- What are the "messages" sent to the workforce and the community due to action or inaction? Answer this question to address the social obligation your employer has.

It's important to have the answers to all of these questions ready for the decision maker.

The maintenance supervisor may be able to help you estimate the investment required for recommended corrective actions.

Below are some additional ideas for you to consider.

- These options must also eliminate or reduce the hazards and the exposures.

- Try to include at least three (real world) but only one or two for this exercise.

- Briefly list low/high-cost solutions that eliminate the problem now/soon.

- Briefly list low/high-cost solutions that reduce the problem now/soon.

- Briefly list the advantages and disadvantages of each solution.

5. When recommending corrective actions, why is it important to answer the question, "What are the costs that might result if/when OSHA inspects?"

a. Helps to educate the employer on enforcement
b. Gives decision maker control over the corrective action
c. To inform the employer about the social imperatives
d. It helps the employer to understand the legal consequences of inaction
Estimating Total Accident Costs

Safety committees should promote the idea that substantial savings in estimated future accident costs may be realized if management approves the recommendation. To do that, you would cite cost estimates for the accident cited in the report and use that total as a baseline estimate for future savings if a similar accident occurs. You should include two categories of accident costs in the recommendation: insured-direct costs and uninsured-indirect costs.

1. **Insured-direct costs**: These costs are usually covered by insurance premiums. They represent just the "tip of the iceberg."

2. **Uninsured-indirect costs**: These are the underlying costs the employer pays for, usually "out of pocket," for consequences not covered by insured-direct costs. They represent the part of the iceberg under water that you don't see, and like the iceberg, the cost are always greater.

Direct and Indirect Costs

Direct costs are usually insured and include:

Direct-insured costs include:

- injured worker's wages during injury;
- workers' compensation payments;
- medical treatment expenses, and
- costs for insured legal services.

Uninsured-indirect costs include:

- Any wages paid to injured workers for absences not covered by workers' compensation;
- The wage costs related to time lost through work stoppage associated with the worker injury;
- The overtime costs necessitated by the injury;
- Administrative time spent by supervisors, safety personnel, and clerical workers after an injury;
- Training costs for a replacement worker;
- Lost productivity related to work rescheduling, new employee learning curves, and accommodation of injured employees;
- Clean-up, repair, and replacement costs of damaged material, machinery, and property;
- The costs of OSHA fines and any associated legal action;
- Third-party liability and legal costs;
- Worker pain and suffering; and
- Loss of goodwill from bad publicity.

Remember our scenario? Let's get a rough estimate of the total accident costs associated with Bob's hand injury (fracture requiring surgery) while working around the machinery. Suppose the uninsured-indirect accident cost totals around $40,000, and the insured-direct (insured) cost is about $60,000. The total cost will be estimated at $100,000 which will, ultimately, paid by the employer.

So, now the question is, how much will the employer save in the future by investing now? We'll answer that question in the next section.

6. What can safety committees use to best emphasize the savings the company may realize if they approve a recommendation?

   a. Total cost estimates for future accidents
   b. Increased workers' compensation premiums
   c. Higher experience modification rates
   d. Loss of production estimates

Return on the Investment (ROI)

So, how much will the employer save in the future by approving your recommendation now? To answer that question we need to determine the return on the investment (ROI). The ROI answers the question, "If the investment prevents a future accident, how much money will we ultimately save in terms of additional sales that we would otherwise have to generate to cover the total costs of the accident?"

To determine ROI, you will usually be given a simple formula. You'll be told that for every dollar invested in safety, you'll save between $2 and $6 in the future. That's probably true, but it is a simplistic response that does not accurately tell the employer what the real savings are: To do
that, you need to know how hard the company works to pay for the costs of accidents. The biggest factor in determining ROI is your company's profit margin (at least in the private sector). That's why we include the company's profit margin in our formula for determining ROI. Let's look at the step-by-step process for determining ROI.

Reference the graphic below. To determine the ROI in terms of business volume (sales), it's necessary to:

1. **Estimate the total additional sales required to cover the accident costs:** If the company in our scenario has a 10% profit margin, it must commit a staggering 10X the future total accident costs ($100,000), or $1 million in additional sales to cover the total accident costs.

2. **Estimate the savings in additional sales if the recommendation is approved:** Subtract the amount of the recommended investment ($10,000) from the total additional sales ($1 million) required to cover a future similar accident to determine total savings in business volume ($990,000).

3. **Estimate the return on investment (ROI):** A recommended investment of $10,000 and a savings of $990,000 in additional sales will give you an ROI as a percentage of ($990,000/$10,000) x 100 = 9,900%

![Total to Direct Costs Ratio](https://www.oshtrain.org/08wk4.png)
7. To determine how much money a company will ultimately save by investing in safety improvements, you would estimate the _____.

   a. direct accident costs (DAC)
   b. return on investment (ROI)
   c. indirect accident costs (IAC)
   d. long-term cost of doing business (CODB)
Module 8: Conducting Safety Committee Meetings

Meetings: You either Love 'em or Hate 'em!

One of the most important factors that impacts the success of the safety committee is the quality of the meetings. I'm sure you've been to meetings that were poorly managed. You probably don't look forward to attending another meeting like that.

Attending safety committee meetings may be thought of as a waste of time, so it's important that they be effective. Believe it or not, safety committee meetings may be very interesting. Let's take a look at some of the things that can help ensure your meetings are not only interesting but exciting!

1. What is one of the most important factors that impacts the success of a safety committee?
   a. Number of people on the committee
   b. Quality of the meetings
   c. Absence of management
   d. Authority to discipline

Characteristics of an Effective Safety Committee Meeting

Meetings are organized: The committee chair has planned the meeting. The meeting starts and ends on time. Committee members follow an agenda that includes new and old business. Every meeting includes some kind of training.

Surprise! The most effective committee meetings are composed of about 80% expected and 20% unexpected activities. It's always a little more interesting if members anticipate a "surprise" somewhere in the meeting.

Role and purpose are understood: The shape of the meeting is a function of the perceived role the safety committee plays. The role of the safety committee answers the question, "who are we?" Role also determines purpose, or "what the safety committee does." It's very important that all members clearly understand what their role and purpose are.

Objectives and completion dates are set: Operational objectives are more than goals. Objectives state results that are observable, measurable, and completed within stated time limits.
For instance, you might want to increase awareness about the cost of accidents. An operational objective supporting this goal might be stated as "Educate all employees in our plant about direct and indirect accident costs by the end of the year."

**Extent of authority is understood:** The degree of authority may be determined by OSHA law and/or the employer. In any case, with authority comes accountability. Authority, accountability, role and purpose are all interrelated. All must be clearly understood.

**Standards of behavior:** Ground rules that shape the “committee culture” are extremely important. What are the commonly accepted norms of behavior during the meeting? Establishing and posting written ground rules during the meeting will help keep the meeting effective. More on this later.

2. In the most effective committee meetings, what percentage of the meeting is composed of unexpected activities?

   a. 20%
   b. 30%
   c. 50%
   d. 80%

**Clear communication:** Does the safety chairperson use all mediums effectively to communicate details of the meeting before, during and after it occurs? Agendas, handouts, videos, guests, and ground rules all help to clearly communicate the message to members.

**Member commitment:** If the meeting is interesting, communication clear, and if effective consequences are designed into the safety system, members will consistently attend. During the meeting members actively participate.

**Delegated responsibilities and duties:** We all know the safety committee chair can’t do it all. It's extremely important that everyone be involved in the meeting process. Active involvement will happen only if responsibilities are delegated to members.

**Member input and interaction:** The successful meeting invites everyone to participate. Interaction is expected; however, ground rules establish appropriate and inappropriate interaction. The most effective safety committee chairs tap into the creativity of each member.

**Members trained:** The safety committee is a great training ground for "management wannabees," and in fact, some companies consider the safety committee a "management apprentice program" for prospective supervisors and managers.
As we learned in other modules, in addition to hazard identification and accident investigation, safety committee members will benefit from other topics as well. They include meeting management (of course), conflict resolution, problem solving, and group communications.

3. Which of the following is a clue that the safety committee is going to be ineffective?
   a. Delegation of responsibilities
   b. Member training
   c. Mandatory participation
   d. Member input and interaction

Preparing for the Meeting

The preparation for the safety committee meeting begins as soon as it's over. What? That's right. As soon as the meeting is over, the effective chairperson will begin preparing for the next meeting while everything is fresh in his or her mind. And, as with every process, the more you do it, the easier it gets. Below are some important actions a chairperson can take to prepare for the meeting.

- Determine and define the purpose of the meeting. What is the meeting supposed to get done? Not all meetings have the same purpose, so don't downplay this task.

- Set the meeting date, time, and place. Regular dates, times, and locations help everyone set their calendars.

- Build the agenda. Be sure to solicit input from all members and other interested persons.
  - Transfer old business.
  - Request input from members.
  - Incorporate new business topics.
  - State objectives.

- Develop training minutes.

- Gather supportive materials.
• Distribute the agenda to the CEO, plant manager, supervisors, etc.

• Post a copy so all employees can see it.

• Place a copy of agenda in Safety Committee file.

4. When should the preparation for the next safety committee meeting begin?

   a. The day before the meeting
   b. Right after the previous meeting
   c. Two weeks prior to the meeting
   d. One week prior to the meeting

Conducting the Meeting

A few years ago, we had a conversation with a student in one of my safety workshops. He mentioned that the first meeting he conducted was an absolute disaster. He didn’t have a clue what to do, so he stumbled through the meeting as best he could. But his fellow committee members were patient, and gave him some patient support. After a few months of trial and tribulation he really mastered the process and is now much more confident and competent in running the meeting. Below are his "tips for conducting successful meetings."

• Arrive early, so you can be ready when others arrive.

• Set up the room to facilitate group communications.

• Refreshments? Why not! A small investment that can have large returns.

• Start on time. Don’t wait for stragglers...it only promotes lateness.

• State purpose and objectives. Helps others focus...stay on target.

• Establish time limits. Very important for planning.

• Set and/or reestablish ground rules. A poster works great for this.

• Review agenda and set priorities.

• Stick to the agenda. Part of the ground rules. Don’t allow off topic discussions.

• Assign responsibilities and completion dates. Make sure they are entered into the minutes.
• Summarize agreements on assignments and completion dates.
• Limit interruptions. Intervene early or interruptions will proliferate.
• Review assignments to clarify expectations.
• Keep minutes or a written record.
• Close on time or before if possible. This is important to everyone.

5. Which of the following is NOT a best practice for conducting safety committee meetings?
   a. Encouraging members to arrive early
   b. Allowing relaxed time limits for discussion
   c. Summarizing agreements on assignments
   d. Limiting interruptions when someone is speaking

Establishing the Ground Rules

Ground rules tell safety committee members about the procedures that are followed and behaviors that are acceptable or not acceptable. It's crucial that ground rules be developed by the members so that they "own" the rules. Ground rules should be written and clearly understood by all members.

You may want to write the ground rules along with the safety committee agenda. Members can review the ground rules as they get ready for the meeting. Below are two basic types of ground rules.

• **Procedural ground rules**: These ground rules establish proper procedures for conducting the meeting.

Procedural ground rules include:

- timelines for the length of the meeting;
- timelines for individual presentations;
- meetings will start and end on time;
- the flow of business will follow the agenda;
- focus on meeting safety-related agenda items only;
- every member has an opportunity to speak;
- decisions will be based on consensus agreement;
- one person, one vote.

- **Behavioral ground rules**: These ground rules guide behaviors of individual members during the meeting.

- arrive on time;
- don’t interrupt while another person is speaking;
- raise your hand to be recognized;
- don’t make negative comments about another person or their ideas;
- focus on what you think does or does not work and give reasons;
- ask questions. There are no stupid questions.

**Old Business**

Start by reviewing any old business you might have from the last meeting. Warning, don’t let this old business build up as it will send the message that the safety committee is a "do nothing" group. Don’t get in the habit of "revisiting" too much.

**6. **"Do not interrupt while another member is speaking," is an example of a _____.

   a. behavioral ground rule  
   b. meeting guideline  
   c. procedural ground rule  
   d. suggested procedure
New Business

Here's where the fun begins. Hopefully, new business in your safety committee may include a variety of topics and tasks. Once again, most new business can be expected, but be sure to include a little bit of a surprise to help keep interest. Here are some ideas for new business:

**Department hazard reports:** Safety committees that have a limited understanding of the valuable contribution they can make to the safety culture usually limit new business to hazard reports.

**OSHA 300 Log Status:** Safety committee members may understand the value of the OSHA 300 Log. In fact, most members do not know what the OSHA 300 Log is. Effective safety committees should be trained on the OSHA 300 Log. They should review it during each meeting to help determine trends. (More on this topic in OSHAcademy course 708 OSHA Recordkeeping Basics).

**Safety Inspection report:** If your safety committee conducts regular safety inspections, it's important to review the results with the safety committee. This can be an excellent opportunity to do some hazard identification and control training. The review of the inspection might include:

- hazard trends;
- potential root causes;
- recommendations for corrective action; and
- cost/benefit analysis related to corrective actions.

**Accident analysis reports:** The committee can review and evaluate the quality of the accident analysis report. The committee should not be involved in the determination of negligence or disciplinary actions. Remember, safety committees are consultants, not the police. The main goal of the safety committee is to improve the system, not place blame. When evaluating accident reports, check for:

- an accurate description of the events leading up to and including the injury event;
- the primary, secondary, and root causes of the accident;
- recommendations for corrective action and system improvement; and
- cost/benefit analysis.
7. Which of the following would be an inappropriate focus when reviewing accident reports in a committee meeting?
   
a. Safety program status
b. Finding fault or blame
c. Quality of accident reports
d. Status of safety training

- **Program reviews:** If members of the safety committee are responsible for evaluating safety programs, they should review the programs quarterly or annually. Program reviews are also very effective in developing continuous improvement strategies.

- **Evaluate safety management system:** Effective safety committees are involved in evaluating the various activity elements of a safety management system. These elements include:

  o **Commitment:** Proactive investment in safety. TMC = time money communications.
  o **Accountability:** Standards, resources, measurement, consequences, evaluation.
  o **Involvement:** Communications, problem solving, suggesting, etc.
  o **Hazard Analysis and Prevention:** Inspection, JHA, control strategies.
  o **Accident Analysis and Correction:** To fix the system, not the blame.
  o **Education and training:** Tied to accountability - natural and system consequences.
  o **Continuous improvement:** To evaluate all the other elements.

**Discuss new rules:** It’s important to review any new company policies, government regulations, or industry standards with the safety committee. An educational "heads up" will help members answer potential questions in their departments.

**Training:** Every safety committee meeting should include some sort of short training session. A short video or presentation by a guest speaker or committee member will help to increase knowledge, skills, and attitudes. A five- or ten-minute mini-training session may be all that’s needed.
8. Which of the following should NOT be placed on the safety committee meeting agenda?

   a. Results of accident investigations
   b. A list of employees violating safety rules
   c. New OSHA rules that apply to work
   d. Results of recommendations made

**Follow-up**

It's not over until the paperwork is done! Once the meeting is over, it's time to begin planning for the next meeting (can't say that too many times :-) It's important to be communicating with the safety committee throughout the month to:

- respond to concerns raised;
- keep in contact with members;
- discuss whether assignments are being met;
- get feedback on meeting;
- make sure minutes are promptly typed, posted and distributed;
- thank members who attended;
- brief members who were absent; and
- place unfinished business on the agenda for the next meeting.

**Revise and improve:** Given all the feedback, the chairperson may more effectively improve the many processes and procedures related to safety committees.
9. When should you discuss unfinished business on the agenda?

   a. At the next meeting
   b. With management when available
   c. After the meeting with each member
   d. When convenient via email