

# Systems of Safety and Strategic Planning for Health & Safety Committees

Written and Produced by



The Rutgers Occupational Training and Education Consortium (OTEC)  
and New Labor



For the University of Medicine & Dentistry of New Jersey (UMDNJ),  
School of Public Health, Office of Public Health Practice



**Copyright © 2009**

UMDNJ School of Public Health and Rutgers OTEC  
All rights reserved

---

# Table of Contents

---

|   |             |
|---|-------------|
| OSHA.....   | <i>iv</i>   |
| UMDNJ School of Public Health.....                  | <i>v</i>    |
| OTEC/LOSHI.....                                     | <i>vi</i>   |
| New Labor.....                                      | <i>vii</i>  |
| The Small Group Activity Method.....                | <i>viii</i> |
| <br>  |             |
| Activity 1: Joint Health and Safety Committees..... | 1           |
| Task.....   | 2           |
| <br>  |             |
| Activity 2: Writing a Mission Statement.....        | 13          |
| Task 1.....   | 14          |
| Task 2.....   | 20          |
| <br>  |             |
| Activity 3: Effective Joint Committees.....         | 31          |
| Task.....   | 32          |
| <br>  |             |
| Activity 4: Hazard Mapping.....                     | 51          |
| Task.....   | 52          |
| <br>  |             |
| Activity 5: Systems of Safety.....                  | 63          |
| Task.....   | 64          |
| <br>  |             |
| Activity 6: Writing Action Plans.....               | 81          |
| Task 1.....   | 82          |
| Task 2.....   | 88          |
| <br>  |             |
| Activity 7: Evaluating the Workshop.....            | 101         |
| Task.....   | 102         |

---

---

DISCLAIMER: This material was produced under grant number SH-17818-08-60-F-34 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U. S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U. S. Government. The U.S. Government does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed.

---

## OSHA

---

Funding for the “*Systems of Safety and Strategic Planning for Health & Safety Committees*” workbook was provided through a one year training grant from the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), Susan Harwood Grants program. The workbook’s contents do not necessarily reflect the views or policies of the U.S. Department of Labor, nor does the mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

It is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a workbook of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer’s legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations.

Finally, over time, OSHA rules and interpretations may be modified in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, visit OSHA’s website at [www.osha.gov](http://www.osha.gov).

---

# UMDNJ School of Public Health

---

## **University of Medicine and Dentistry (UMDNJ)**

### **School of Public Health (SPH)**

#### **Office of Public Health Practice (OPHP)**

OPHP offers health and safety training throughout New York and New Jersey in construction, general industry, hazardous materials operation, occupational safety and industrial hygiene.

Courses offered by OPHP lead to nationally recognized certifications in the asbestos, lead, hazardous waste, occupational health, construction, and other industries. OPHP is centrally located in New Jersey for the convenience of New York City and New Jersey based students.

#### **Programs and Services**

For more information on courses offered by OPHP:

#### **Website:**

<http://ophp.umdj.edu>

Office of Public Health Practice  
UMDNJ- School of Public Health Practice  
683 Hoes Lane West, Suite 110  
Piscataway, New Jersey, 08854  
Phone (732) 235-9450

#### **OPHP Staff**

Mitchel A. Rosen, Director, [mrosen@umdj.edu](mailto:mrosen@umdj.edu)  
Koshy Koshy, Program Manager, [koshyko@umdj.edu](mailto:koshyko@umdj.edu)  
Gina Gazitano, Program Coordinator, [deleongm@umdj.edu](mailto:deleongm@umdj.edu)

---

# OTEC/LOSHI

---

## **Occupational Training and Education Consortium (OTEC)**

OTEC partners with unions, employers and other organizations to develop innovative training programs that work toward strengthening the existing systems of safety in the workplace. Relying on participatory educational models, OTEC is committed to building a lasting “culture of safety” in workplaces in New Jersey and around the country.

## **Latino Occupational Safety and Health Initiative (LOSHI)**

LOSHI was established by OTEC and New Labor. Through partnerships with employers, staffing firms, unions and community and faith based organizations LOSHI has developed a series of comprehensive site-specific safety and health training programs, trained over 100 worker-trainers and delivered thousands of hours of training to Latino workers throughout New Jersey.

## **Programs and Services**

For more information about OTEC’s programs and services, contact:

Occupational Training and Education Consortium  
The Labor Education Center  
Rutgers, The State University of New Jersey  
50 Labor Center Way  
New Brunswick, NJ 08901-8553  
Phone: (732) 932-6926  
E-mail: [otec@rci.rutgers.edu](mailto:otec@rci.rutgers.edu)

## **OTEC Staff**

Michele Ochsner, Director  
Carmen Martino, LOSHI Project Director  
Debbie McNeill, Program Coordinator

## **Illustrations**

Mark Hurwitt  
E-mail: [mark@hurwittgraphics.com](mailto:mark@hurwittgraphics.com)  
website: [www.hurwittgraphics.com](http://www.hurwittgraphics.com)

---

# New Labor

---

New Labor is an alternative model of worker organization that combines new and existing strategies to improve working conditions and provide a voice for immigrant workers in central New Jersey. Adapting to changes in the economy, New Labor strategically utilizes worker advocacy, customized training, and grassroots enterprises to leverage members' interests at work and in their communities. Since its founding in January of 2000, New Labor has grown to over 1,400 dues paying members and provides important solutions to the challenges faced by low-wage workers in today's economy.

**Visit New Labor's website at [www.newlabor.net](http://www.newlabor.net)**

For more information about New Labor contact:

New Labor  
103 Bayard Street  
Second Floor  
New Brunswick, NJ 08901  
Phone: (732) 246-2900  
E-mail: [info@newlabor.net](mailto:info@newlabor.net)

## **New Labor Staff**

Rich Cunningham, Executive Director  
Lou Kimmel, Director of Education

## **New Labor Peer-to-Peer (P<sub>2</sub>P) Trainers**

Rutila Carbajal  
Victoria Ibañez  
Eric Acevedo  
Gertrudis Rojas  
Karla Guillen  
José Victoriano  
Rosa Andahua  
Martin Caballero  
Nina Rivera  
Katty López  
Martha Contreras  
Leonor Olmedo  
Hans Cruz  
Rosalia de Santiago

Asunción Hernández  
Andrea Cervantes  
Sandra Zarate  
Guilbaldo de la Cruz  
Gustavo Vazques  
Andrés Juarez  
José Villanueva  
Germán Flores  
Alejandro de la Paz  
Celso Ramirez  
Luciano Fernandez  
Felipe Iracheta  
Francisco Valentin  
Lorenzo Vasquez

Juan Carlos Hernández  
Angélica Ambrocio  
Paul Ibañez  
Emma Zafra  
Yadira Ramirez  
Claudio Lopez  
Eloyna Bonilla  
Omar Sierra-Barbosa  
Lucilo Garcia  
Lucia de Santiago  
David Lozano  
Omar Mijangos  
Consuelo Noguera  
Yesenia Sierra Hernández

---

# The Small Group Activity Method

---

## Basic Structure

The Small Group Activity Method\* is based on a series of problem-solving activities. An activity can take from 45 minutes to an hour. Each activity has a common basic structure:

- **Small Group Tasks**
- **Report-Back**
- **Summary**

**1. Small Group Tasks:** The training always begins with groups working together at their tables. Each activity has a task, or set of tasks, for the groups to work on. The task asks that the groups use their experience and the factsheets to solve problems and make judgements on key issues.

**2. Report-Back:** For each task, the group selects a scribe that takes notes on the small group discussion and reports back to the class as a whole. During the report-back, the scribe informs the entire class as to how his or her group solved the particular problem. The trainer records each scribe's report-back on large pads of paper in front of the class so that everyone can refer to them.

**3. Summary:** Before the discussion drifts too far, the trainer needs to bring it all together during the summary. Here, the trainer highlights the key points of the activity and brings up any problems or points that may have been overlooked during the report-back.

*\*The Small Group Activity Method (SGAM) is based on a training procedure developed by England's Trades Union Congress (TUC) in the 1970s. The Labor Institute and Oil, Chemical, and Atomic Workers Union (now part of the United Steelworkers Union) used a similar method around economic and health and safety issues for workers and further developed the procedure into SGAM.*



---

### **Three Basic Learning Exchanges**

The Small Group Activity Method is based on the idea that every training is a place where learning is shared. With SGAM, learning is not a one-way street that runs from trainer to worker. Rather SGAM is a structured procedure that allows us to share information. It is based on three learning exchanges:

- **Worker-to-Worker**
- **Worker-to-Trainer**
- **Trainer-to-Worker**

**Worker-to-Worker:** Most of us learn best from each other. SGAM is set up in such a way as to make the worker-to-worker exchange a key element of the training. The worker-to-worker exchange allows participants to learn from each other by solving problems in their small groups.

**Worker-to-Trainer:** Lecture-style training assumes that the trainer knows all the answers. With SGAM it is understood that the trainers also have a lot to learn and this is the purpose of the worker-to-trainer exchange. It occurs during the report-back and it is designed to give the trainer an opportunity to learn from the participants.

**Trainer-to-Worker:** This is the trainer's opportunity to clear up any confusion and make points they think are key. By waiting until the summary section, trainers know better what people need to know.



---

# **Activity 1: Joint Health and Safety Committees**

## **Purpose**

---

To discuss why we need a health and safety committee.

This activity has one task.

## **TASK 1**

---

In your groups pick a scribe and review the factsheets on pages 4-9. Then based on the factsheets and your own experience, make a list of reasons why you want to form a labor/management (joint) health and safety committee. (Where appropriate, make a note of the factsheet(s) you used to create your list.)

**1.**

**2.**

**3.**

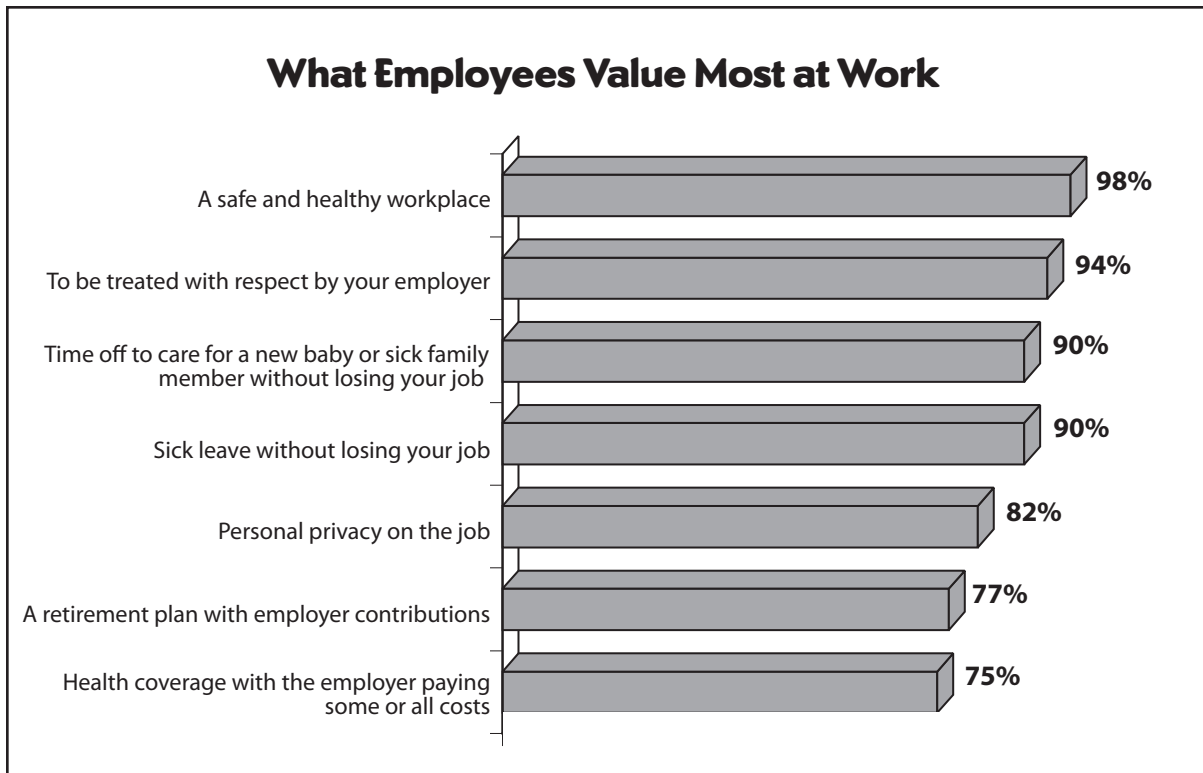
**4.**

**5.**



# 1. Employees Care About Health & Safety

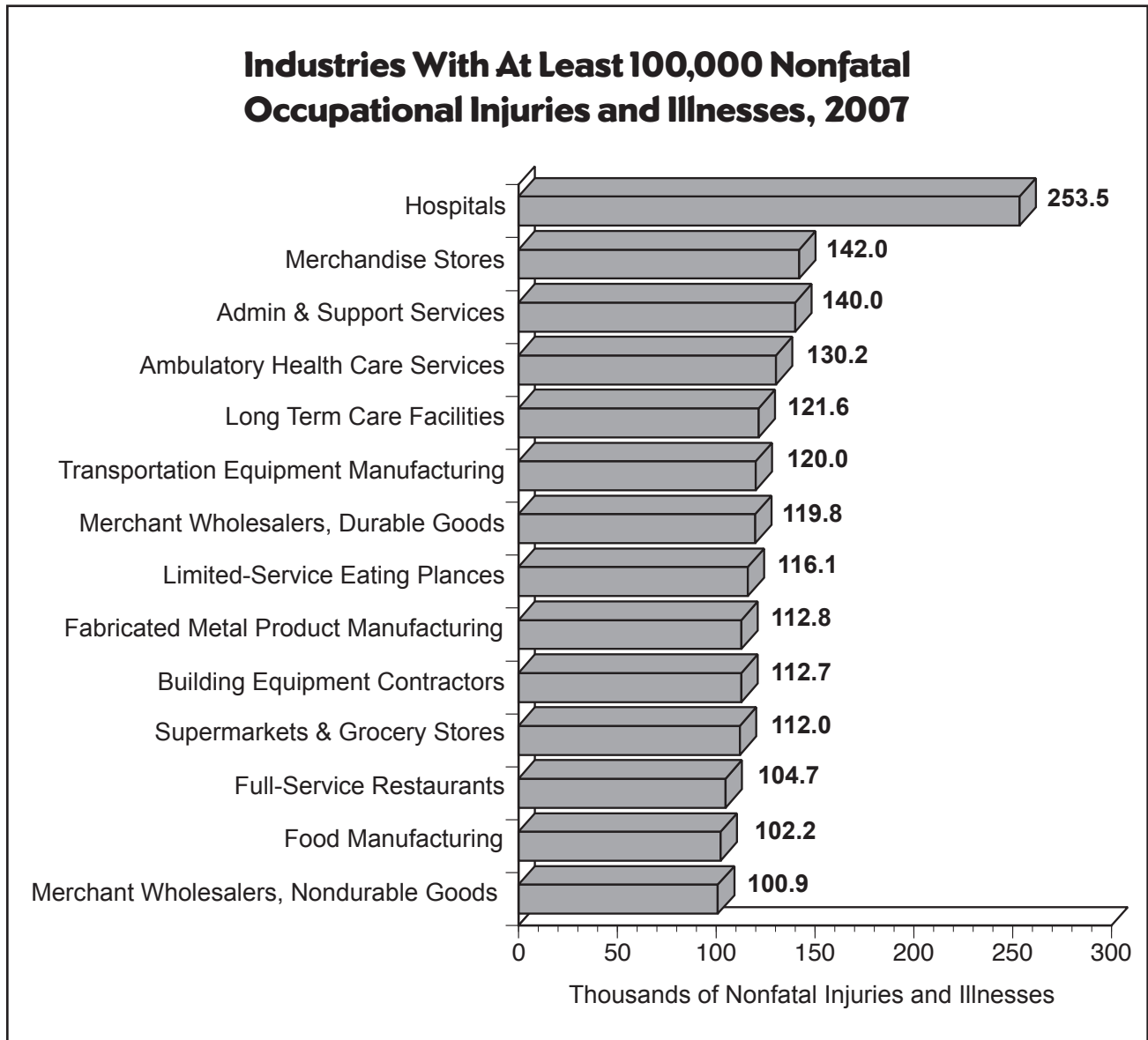
In a survey to determine what workers nationwide value most about their jobs, a safe and healthy workplace was ranked essential or very important by 98% of the respondents.



Source: Hart Research Associates, Public Opinion Poll, January 2001.

## 2. Millions Exposed to Injuries and Illnesses

It is estimated that every year six million U.S. workers are injured or made ill on the job. Nearly 6,000 a year die from job injuries and 50,000 die from work-related illnesses.



Source: Bureau of Labor Statistics, U.S. Dept. of Labor, *Workplace Injuries and Illnesses*, 2007.

### 3. Health & Safety Covers Many Issues

Health and safety is not confined to traditional issues such as chemical exposure, noise, fire, electrical hazards, and ergonomics. Recent research has documented how speedup, low wages, conflicting job demands, lack of flexible schedules, and lack of respect impact employee health.

#### **Stress Is a Big Problem**

Stress is one of the more commonly documented outcomes of long work hours, and is recognized as a determinant of employee health and productivity. Research evidence suggests the following:

- Working long hours contributes directly to unhealthy lifestyles such as increased cigarette and alcohol consumption, poor nutrition, and sleeping problems – which are well-documented risk factors in heart disease and serious health conditions. These risk factors differ by gender.
- Shift workers' lack of sleep can affect quality of life as well as pose safety risks. Health problems directly related to shift work include gastrointestinal disorders, cardiovascular diseases, cancer, and menstrual and pregnancy complications in women. Parents' shift schedules may also affect the well-being of their children.
- For men and women, working evening and rotating shifts is associated with a higher prevalence of job strain, and working evening shifts is associated with increased risk of psychological distress.
- Men who work evening, rotating or irregular shifts have higher probabilities of experiencing one or more chronic conditions over a four-year period, compared with men who work days. These conditions included asthma, arthritis, rheumatism, back problems, high blood pressure, migraines, chronic bronchitis or emphysema, diabetes, epilepsy, heart disease, cancer, and stomach or intestinal ulcers.

Sources: Labor Occupational Health Program, Center for Occupational and Environmental Health, School of Public Health, University of California, Berkeley, *Tools of the Trade, A Health and Safety Handbook for Action*, 2006. Graham S. Lowe, PHD, *Control Over Time and Work—Life Balance: An Empirical Analysis*, November, 2005.



## 4. Joint Health and Safety Committees

Employees obviously have a vested interest in wanting to create and maintain safe, healthy work environments. This can only be accomplished through the creation of a labor/management (joint) health and safety committee that welcomes and encourages all employees to get involved in the process.

According to OSHA, the more employees are involved in safety and health-related activities, the more that they will appreciate the potential hazards that exist at the facility, the more likely that they will be pro-active about health and safety, and the more likely that the overall safety culture of the facility will strengthen.

| <b>The Advantages of a Joint Health and Safety Committee</b> |   |
|--|---|
| ✓  | Employees are the ones in contact with potential hazards and have a vested interest in creating and maintaining a safe, healthy work environment.   |
| ✓  | Productive joint committees make group decisions and group decision making has 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 and the joint committee is the perfect vehicle for that input.   |
| ✓  | Employees who are encouraged to offer their ideas and whose contributions are taken seriously are more satisfied and productive.  |
| ✓  | The more that employees are involved in the various facets of the program, the more they will learn about safety, what is causing injuries at their facility, and how they can systematically reduce the risks. |
| ✓  | The more employees know and understand, the greater their awareness will be and the stronger the safety culture of the organization will become.  |

*(continued)*

## 4. Joint Health and Safety Committees *(continued)*

### **What Is a “Safety Culture?”**

A culture of safety is the shared commitment of management and employees to ensure the safety of the work environment. A culture of safety includes all aspects of the work environment. It encourages everyone in an organization to project a level of awareness and accountability for safety.

Employees perceive the presence of a culture of safety based on multiple factors, including:

- Actions taken by management to improve safety
- Worker participation in safety planning
- Availability of written safety guidelines and policies
- Availability of appropriate safety devices and protective equipment
- Influence of group norms regarding acceptable safety practices
- Socialization processes around safety that personnel experience when they first join an organization

All of these factors serve to communicate the organization’s commitment to safety.

## **5. What Can Your Joint Committee Do?**

Joint health and safety committees can engage in a wide range of activities including:

- Conducting site inspections
- Analyzing routine hazards in each step of a job or process and preparing safe work practices
- Developing and revising safety rules
- Conducting training programs for current and new hires
- Conducting accident/near miss incident investigations
- Engaging in decision making throughout the facilities' operations
- Conducting pre-use and change analysis
- Participating as safety observers and safety coaches
- Reporting hazards and being involved in finding solutions to the problems

Source: [http://www.osha.gov/SLTC/etools/safetyhealth/comp1\\_empl\\_envolv.html](http://www.osha.gov/SLTC/etools/safetyhealth/comp1_empl_envolv.html)

## **Summary**

---

1. Ninety-eight percent (98%) of all workers nationwide believe a safe and healthy workplace is essential.
2. It is estimated that every year six million U.S. workers are injured or made ill on the job. Nearly 6,000 a year die from job injuries and 50,000 die from work-related illnesses.
3. Recent research has documented how speedup, low wages, conflicting job demands, lack of flexible schedules, and lack of respect impact employee health.
4. Employees are the ones in contact with potential hazards and have a vested interest in creating and maintaining a safe, healthy work environment.
5. A culture of safety is the shared commitment of management and employees to ensure the safety of the work environment. A culture of safety includes all aspects of the work environment. It encourages everyone in an organization to project a level of awareness and accountability for safety.

# EVALUATION

1. How important is this activity for safety committee members at your facility?

**Please circle one number.**

| Activity Is Not Important |   |   | Activity Is Very Important |   |
|---------------------------|---|---|----------------------------|---|
| 1                         | 2 | 3 | 4                          | 5 |

2. Please **put an "X" by the one fact sheet** you feel is the most important.

|  |   |  |                                       |
|--|---|--|---------------------------------------|
|  | 1. Employees Care About Health & Safety       |  | 4. Joint Health and Safety Committees |
|  | 2. Millions Exposed to Injuries and Illnesses |  | 5. What Can Your Joint Committee Do?  |
|  | 3. Health & Safety Covers Many Issues         |  |                                       |

3. Which summary point do you feel is most important?

**Please circle one number.**

| Most Important Summary Point |    |    |    |    |
|------------------------------|----|----|----|----|
| 1.                           | 2. | 3. | 4. | 5. |

4. What would you suggest be done to improve this activity?

---



---



---



---



---



## **Activity 2: Writing a Mission Statement**

### **Purpose**

---

To write a mission statement for the Joint Health and Safety Committee.

**This activity has two tasks.**

## **TASK 1**

---

In your groups pick a scribe and review the factsheets on pages 16-18. Then working together, make a list of the things you would achieve if you were successful as a Joint Health and Safety Committee.

**1.**

**2.**

**3.**

**4.**

**5.**





## 1. What's Possible?

While you are thinking about what your health and safety committee can accomplish consider the following:

- The committee can accomplish real change in the workplace. It can save people's health and even their lives.
- It can provide opportunities to enhance the critical thinking and problem solving skills of members. And when there are successes, the committee's work can help everyone appreciate the value of working together.
- A joint health and safety committee can be a bridge across different work areas, job classifications, and even different unions. Without realizing it, people throughout a facility often share similar health and safety problems. A committee that includes members from different work areas and jobs provides opportunities to compare experiences and work together.

## 2. Challenges We Face

Below are obstacles to a successful safety and health program that have been identified by supervisors and employees during OSHA-sponsored workshops. In the right column are participant suggestions for overcoming the obstacles.

### Supervisor-Identified Obstacles

| Obstacles  | How to Overcome   |
|--|---|
| 1. Fear of losing job  | Trust in the system, do the right things and maintain integrity     |
| 2. No money for needed changes                                     | Management must support   |
| 3. Risk in spending money for safety                               | Must trust and support management                                   |
| 4. "What's in it for me" attitude                                  | Must take personal responsibility                                   |
| 5. People want change but are afraid to take responsibility for it | Be open and trust others  |
| 6. No support from upper management                                | Management must support   |
| 7. No time or follow-through from upper management                 | Management must support and provide time and resources              |
| 8. Competing priorities—production is number one                   | Management must balance   |
| 9. Overwhelmed with workload                                       | Management must provide resources and balance competing pressures   |
| 10. Turnover too high  | Trust that it will decrease as culture and work atmosphere improves |
| 11. Double standards   | Everyone must play by the same rules                                |
| 12. Lack of trust—poor ethics within organization                  | Take personal responsibility and trust co-workers                   |
| 13. Lack of open communication and listening                       | Must be open and trusting   |

(continued)

## 2. Challenges We Face *(continued)*

### Employee-Identified Obstacles

| Obstacle  | How to Overcome   |
|---|---|
| 1. Fear and lack of trust   | Trust in the system, do the right things and maintain integrity   |
| 2. Supervisors not willing to listen and support                              | Supervisors must support and be open  |
| 3. Communication is top down  | Supervisors must be open and employees must take personal responsibility for their actions  |
| 4. Organization is not focused on safety                                      | Management must provide necessary levels of resources and commitment  |
| 5. Supervisors not willing to hear problems and receive feedback              | Supervisors must be open and willing to listen, employees must not wait to take personal responsibility for their actions   |
| 6. Intimidation tactics   | Take personal responsibility, trust the system, communicate with supervision  |
| 7. People not willing to take personal responsibility—too easy to shift blame | Take personal responsibility and operate within guidelines, hold supervisors and peers accountable  |
| 8. Production is number one   | Management must support and provide time and resources for safety   |
| 9. Lack of consistency and follow through                                     | Management must realize and commit to long term effort...employees must be willing to examine themselves, receive feedback and be willing to improve through change |
| 10. Them vs. Us attitude—Win-Lose   | Take responsibility and operate from Win-Win  |

Source: OSHA Safety and Health Management Systems eCAT, *Obstacles to a Successful Safety and Health Program*.



## **TASK 2**

---

In your groups review the factsheets on pages 22-26. Then working together using the list from Task 1, the factsheets, and your own experiences, draft a mission statement for your health and safety committee.

**Proposed Mission Statement of the Health and Safety Committee:**



### **3. What's in a Mission Statement?**

Creating and maintaining a successful, well-respected health and safety committee is a difficult task. There will always be differences of opinion, difficult questions to answer, and completely different or even opposing points of view on how to solve a health and safety problem.

In order to be successful a health and safety committee needs a clearly defined and widely shared mission statement. The mission statement should express the long-term vision and values of the committee.

A unifying mission allows the members of the committee to work together for a common purpose and provides the foundation for developing a strategic plan to improve the work environment.



## **4. Why Are Mission Statements Important?**

A mission statement provides direction. It defines your purpose or more to the point, why you exist. It can also act as a cushion or safety net when the committee fails or loses its sense of direction.

There will be situations where the committee falls short of its objectives:

- Solving problems may take longer than expected
- Co-workers may start to question the effectiveness of the committee
- They may resist the committee's efforts to focus on health and safety

In these situations members of the committee can lose their sense of direction. They may reach the point where they'll need to remind themselves why they are working together.

Falling back on the mission statement will enable the committee to stay focused and committed to the work that needs to be done.

## **5. Creating a Workable Health & Safety Committee Mission Statement**

An effective mission statement should bring about the kind of emotional or motivational response that grabs people's attention. The mission statement should also be:

- Easily understood and embraced by all workers
- Acted upon by all workers every day
- Firmly rooted in the work environment culture of safety that everyone operates in

## **6. What to Leave Out of a Mission Statement**

In writing your mission statement avoid the following:

- Details
- Specific Time Tables
- Individual Assignments
- Measurements
- Tasks

Most of the items listed above would be included in your health and safety committee action plan. You will be provided with an opportunity to create a preliminary action plan in Activity 5.

## 7. Sample Mission Statements

### **Example A:**

*The Health and Safety Committee is dedicated to creating and maintaining a facility that is a safe environment for all employees and the community.*

### **Example B:**

*The purpose of the Health and Safety Committee is:*

- 1. to promote continuous safety improvement through worker involvement and communication*
- 2. to provide a forum to address issues, procedures, policies, concerns, projects, etc. that impact facility health and safety performance*
- 3. to encourage workers to take a role in safety and empower them to correct unsafe items*
- 4. to reinforce the need for all employees to actively care about their coworkers*

### **Example C:**

*The purpose of the Health and Safety Committee is to identify and develop additional or improved work processes, policies and procedures that:*

- 1) lead to improved safety performance,*
- 2) provide tactical support for Downstream Safety and Occupational Health strategies,*
- 3) lead the integration of PSM into the culture.*

### **Example D:**

*Provide leadership in the development, implementation, education and involvement of everyone in safety, occupational health and loss prevention programs to assure the safe operation of the facility.*

**Example E:**

*The purpose of the Health and Safety Committee is to:*

- 1. Promote continuous safety improvement through employee Involvement and communication,*
- 2. Provide a forum to address issues, procedures, policies, concerns, projects, etc. that impact refinery health and safety performance,*
- 3. Oversee and prioritize the work of the Health and Safety Committee,*
- 4. Organize and lead the Central Safety Committee meetings,*
- 5. Encourage employees to take a role in safety and empower them to correct unsafe items, and*
- 6. Reinforce the need for employees to actively care about their coworkers.*

**Example F:**

*The purpose of the Health and Safety Committee is to provide leadership in the development, implementation, education and involvement in safety by:*

- Promoting continuous safety improvement through employee involvement training and education.*
- Encouraging employees to take an active role in safety and empowering them to identify and correct unsafe conditions and promote safe employee behavior.*
- Providing a forum to address concerns, issues, policies, procedures and projects that impact health and safety.*
- Reinforcing the need for all employees to look out for one another and work together as a team.*
- Improving communications between all employees and management on safety issues, especially conditions relevant to our situation.*
- Educating employees to understand that safe work practices are not only for the workplace, but for everything we do on and off the job.*

## Summary

---

1. The committee can accomplish real change in the workplace. It can save people's health and even their lives.
2. Creating and maintaining an effective joint health and safety committee will be a challenge and it will take a considerable amount of time and attention.
3. It is essential that a health and safety committee have a clearly defined and widely shared mission statement.
4. A unifying mission enables members of the committee to work together for a common purpose and provides the foundation for developing a strategic plan to improve the work environment.
5. A mission statement provides direction. It defines your purpose or more to the point, why you exist. It can also act as a cushion or safety net when the joint committee fails or loses its sense of direction.
6. An effective mission statement should bring about the kind of emotional or motivational response that grabs people's attention.
7. Mission statements should avoid the following:
  - Details
  - Specific Time Tables
  - Individual Assignments
  - Measurements
  - Tasks

# EVALUATION

1. How important is this activity for safety committee members at your facility?

**Please circle one number.**

| Activity Is Not Important |   |   | Activity Is Very Important |   |
|---------------------------|---|---|----------------------------|---|
| 1                         | 2 | 3 | 4                          | 5 |

2. Please **put an "X" by the one fact sheet** you feel is the most important.

|  |  |
|--|--|
| 1. What's Possible?                      | 5. Creating a Workable Health & Safety Committee Mission Statement |
| 2. Challenges We Face                    | 6. What to Leave Out of a Mission Statement                        |
| 3. What's in a Mission Statement?        | 7. Sample Mission Statements                                       |
| 4. Why Are Mission Statements Important? |  |

3. Which summary point do you feel is most important?

**Please circle one number.**

| Most Important Summary Point |    |    |    |    |
|------------------------------|----|----|----|----|
| 1.                           | 2. | 3. | 4. | 5. |
| 6.                           | 7. |    |    |    |

4. What would you suggest be done to improve this activity?

---



---



---



---



---





---

## **Activity 3: Effective Joint Committees**

### **Purpose**

---

To increase our knowledge and understanding of how to make our health and safety committee more effective.

**This activity has one task.**

## **TASK**

---

Please review the factsheets on pages 34-48. Then make a list of recommendations/actions for making your current committee more effective (or if your committee is just getting started, list the steps you will take to get things going and how you want to structure the committee).

**List of Recommendations for your Safety Committee:**

**1.**

**2.**

**3.**

**4.**

**5.**

**6.**

## **1. Effective Healthcare Facility Health and Safety Committees**

The best committee structure is a joint labor-management committee. In facilities where workers are represented by a union, the committee may be formally recognized in the contract or established through years of “past practice.”

The joint committee provides all workers with a formal “window” to discuss and participate in the decision making processes that focus on their health and safety concerns.

To be effective the following are required:

- The committee needs to consist of equal numbers of labor and management
- In facilities where workers are represented by a union, the union members should be picked by the union
- The chairperson should rotate on a regular basis
- Someone should take the minutes for each meeting and they should be checked regularly to ensure that they accurately reflect the meeting

## **The Duties of the Committee**

The duties of the committee may include:

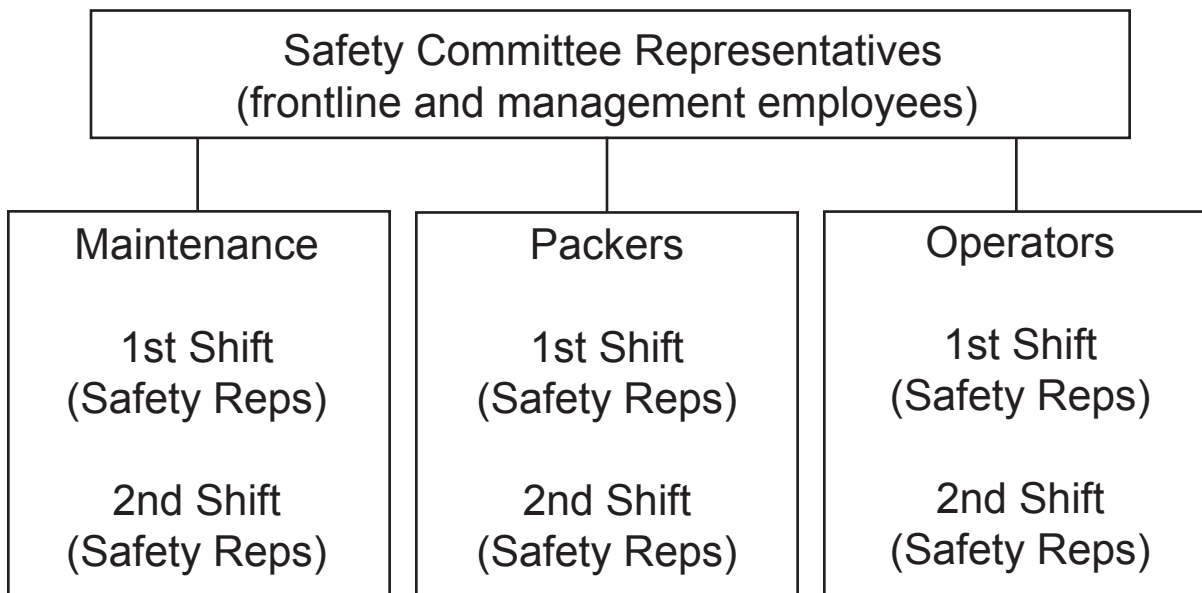
- Developing and reviewing policies and procedures for safe and healthy work conditions for employees
- Developing and evaluating all safety and health program
- Establishing and implementing procedures for workplace safety inspections
- Establishing procedures for investigating and recording all workplace accidents, illnesses and exposures
- Assuring implementation of OSHA standards—including resource allocation
- Making recommendations in response to exposure incidents
- Reviewing screening and surveillance data
- Recordkeeping

Source: Occupational Safety and Health Administration (OSHA), CPL 2-2.69, *Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens, Appendix A, Typical Committees in Healthcare Facilities*, Nov., 2001.

## 2. Committee Structure

The joint labor-management committee will probably include three to four worker representatives and three to four management representatives. The committee will need a structure that is representative of the facility. The joint committee should have representatives from all major departments, shifts, and work groups.

### A Proposed Facility Structure:



### **3. No Free Lunch**

Management needs to invest in the joint health and safety committee if it is to function properly.

#### **Education and Training**

Informed committees do a better job of dealing with health and safety concepts and the legal duties under OSHA standards. Training invested in a health and safety committee will reap rewards in the form of a safer and healthier workplace.

#### **Some ideas for investment:**

- Send committee members to classes given in local area colleges and technical colleges.
- Build a health and safety library
- Subscribe to safety magazines and/or newsletters.

## 4. Common Pitfalls

Committees often stumble or are steered into pitfalls that drain their energy and make workers in the facility see it as a waste of time. Some of the more common pitfalls include:

### 1. The List-Making Process

This is also called the broken ladder committee. If committee meetings deal only with lists of maintenance jobs (repairs, etc.) and a discussion of which ones were completed and arguments over the ones that were not done, the committee is probably not doing much more than keeping the maintenance department busy.

Repairs are important, but they should be done routinely, not saved for committee meetings. Committee meetings are for discussing problems, company policies, accidents exposures, test results, and investments in equipment.

### 2. The Employer-Dominated Committee

The joint committee should not be dominated by managers. If managers always set the agenda, always chair the meetings, and always makes the recommendations, the committee will lose its effectiveness. There must be involvement on the part of the employees beyond just listening and receiving the facility management's opinions.



### **3. Management Only Committees**

The joint health and safety committee is powerless if behind the scenes, management has their own committee making all the important decisions.

Management-only committees review the recommendations and the information that managers identify— workers are not involved. As a result, the joint committee is just “window dressing.”

To be effective, the joint health and safety committee has to involve the workforce. This means rotating chairpersons and if a union is present, it must have input in all discussions, be allowed to put issues on the agenda, and have joint control over the minutes of the meeting.

## 5. Improving the Work Environment

An effective health and safety committee's primary purpose is to improve the work environment. The committee will need to think of this activity as an on-going process that includes the following:

### 1. Reach out to all employees.

The committee needs to represent the the entire workforce. This can only be done by actively seeking their input and concerns.

### 2. Develop a list of health and safety problems.

The committee should review a comprehensive list of worker health and safety concerns. This information can be gathered by conducting a facility-wide survey and/or through one-on-one discussions with employees.

### 3. Select priority concerns.

This may be one of the most difficult tasks facing a safety and health committee. Issues that workers are concerned with may not be the same issues the committee would tackle first. Members of the committee need credibility to be effective in the eyes of co-workers and management. The committee can build credibility by solving problems that are of significant concern to employees.

### 4. Work toward incremental change.

A health and safety committee should attempt to solve small or easy problems first before they attempt to make major changes. From the concerns of the employees, address the ones that you feel will be easily solved. Build your committee on small incremental changes to begin with. It is essential that the safety committee have the backing of everyone.

### 5. Build toward larger and more comprehensive changes.

From small beginnings, tougher issues can be solved. As the committee gains credibility it will be able to tackle more difficult issues.

## 6. Understanding Levels of Activity

In order to solve problems the health and safety committee needs all the help it can get from everyone employed at the facility. But not everyone will make the same commitment.

- Co-workers who cannot commit themselves in a big way may be willing to help out with smaller tasks.
- A work group that has no experience working together may not be ready to tackle a major issue with dramatic action. But they may be willing to work together in a smaller way to solve a safety concern that bothers all of them.

There are many levels of activity and there are different ways for workers to participate in solving problems.

**The job of a health and safety committee is to find the tasks and activities suited to the situation and to increase the level of activity as the group's work experience, knowledge and commitment grows.**

Start with issues and goals the group feels comfortable with.

## 7. Health & Safety Problem Solving

### **Step 1: Small group discussions.**

There is no substitute for getting people together at lunch, on a break or after work. It is very important to get everyone's ideas out and to get everyone involved in giving the health and safety committee direction.

### **Step 2: Select a problem.**

You can't solve everything at once. The committee needs to pick one or two problems to concentrate on. When identifying problems to solve keep the following in mind:

- choose problems workers are concerned about
- start small or with an issue you can solve
- deal with worker concerns, not your own or someone else's agenda

### **Step 3: Develop an action plan.**

This can be simple or more complicated. Sometimes just bringing a safety matter to management's attention will do the trick. For some issues the committee must document the problems, show how they can be solved, and bring in experts to back up recommendations.

It's important that workers be informed and that you try to involve as many people as possible. Don't be afraid to share responsibility.

### **Step 4: Evaluate your activity on a regular basis.**

A health and safety committee will only learn by doing and then discussing what worked, what didn't work and why.

| <b>Tips for Small Group Meetings</b> |   |
|--------------------------------------|---|
| ✓                                    | Choose a comfortable, convenient social setting—lunchtime, after work, etc.   |
| ✓                                    | Let people know why you want to meet. Let them know you need their input. Remind them of the time and place.  |
| ✓                                    | Have an agenda (a plan for your meeting). This can be a simple note to yourself jotted down on paper.   |
| ✓                                    | Organize the meeting so that there is “give and take” (or two-way communication). You may have information to share, but make sure part of the meeting is used to get feedback from members.      |
| ✓                                    | When starting the meeting, explain what the meeting is about, briefly and clearly.  |
| ✓                                    | Make sure everybody knows each other. Don’t assume that they do. Ask everyone to introduce themselves, say where they work, and something about the health and safety issue they want to discuss. |
| ✓                                    | Make sure the discussion moves around and includes everyone. Ask each person what they think about the issue.   |
| ✓                                    | When the meeting is over, sum up and review the main points. Agree on what follow-up plans are needed and how they will be carried out.   |

## 8. Information Is Power

Informed and educated health and safety committees function better. Knowledge of the laws, health effects, and standards relating to exposures will lend credibility to the committee. There are a number of useful resources that health and safety committees can access for information.

Listed below are some examples of information resources:

- American Association of Poison Control Centers  
[www.aapcc.org](http://www.aapcc.org)
- National Institute of Occupational Safety and Health  
[www.cdc.gov/niosh](http://www.cdc.gov/niosh)
- OSHA  
[www.osha.gov](http://www.osha.gov)
- Joint Commission on Accreditation of Healthcare Organizations  
[www.jcaho.com](http://www.jcaho.com)
- The Centers for Medicare & Medicaid Services (formerly the Healthcare Financing Administration)  
[www.cms.hhs.gov](http://www.cms.hhs.gov)
- Local universities with a public health or labor relations department
- Company work rules and policies, such as those regarding lift limits, emergency response, etc.

## 9. Health & Safety Committee Activities

There is no set list of activities for a health and safety committee. A really effective committee will be limited only by its imagination and energy, and will most likely come up with activities not listed in this workbook. In this section, we'll briefly discuss some activities that can be part of a committee's approach to health and safety problems.

### 1. Get information from co-workers.

The most effective way to involve the whole workforce, and earn their respect, is to ask for their help. Let them tell you what the health and safety problems are. This can be done quite easily by conducting a simple survey that will give the committee plenty of information.

### 2. Communicate and educate.

In order to get good results from a health and safety program, the committee needs to have the support of the people working in the facility. This requires communication and education.

All workers should be educated about the hazards of the job they work on. The committee should establish a continuous education program to inform everyone about workplace hazards.

Communication is essential if the committee wants all members to think about health and safety, and be aware of the committee's work. Some ways to communicate about health and safety items include:

- email, blogs, and websites
- reports at other facility or union meetings
- leaflets or bulletins passed out to all workers
- posters on the bulletin board
- classes conducted by health or safety experts, open to all workers
- a health and safety newsletter, or article in the facility or union newsletter

*(continued)*

## **9. Health & Safety Committee Activities** *(continued)*

### **3. Keep lists of hazardous substances.**

Every employee has the right to know about all the hazardous substances used in the workplace. Make sure the committee has a list that is regularly updated, and that all information about the dangers of the substances are known to the committee, as well as all employees.

### **4. Review new equipment, sharps devices and work procedures and propose changes.**

The committee should review new equipment and sharps devices to ensure that they meet accepted standards. Sometimes these reviews can spot hazardous conditions before the equipment or sharps devices go into operation, and thus prevent injuries or exposures.

A good committee will propose changes in work procedures, based on employee complaints, new information received, or after an injury or exposure has occurred.

### **5. Keep records.**

It's crucial that the committee have data about employee injuries, exposures and illnesses. Many times, a series of injuries or exposures will be the only clue that a safety and health hazard is present. Records should be kept on the OSHA 300 Log and Sharps Injury Log and they should be annually reviewed for the purpose of identifying accident or injury patterns that can be eliminated.

The committee does not want to get bogged down in accident numbers and government reporting forms. But a smart committee will understand that it needs information in order to get a clear picture of the health and safety situation in the facility.



**6. Keep posted on legal issues.**

Every committee should have one or two people designated as its “legal experts.” Laws dealing with occupational safety and health are constantly changing, and many times state laws differ from federal laws. When new laws are passed the committee should discuss how the law will be implemented.

When the government changes a standard, the committee should discuss how these changes will be implemented in the workplace.

**7. Maintain a library or resource center.**

Since information is so crucial to making changes, a good committee will build up a library of books, films, pamphlets, etc.

These can be used as a reference to seek information about hazardous substances, or as an educational tool to get information to the involved workers.

**8. Investigate accidents.**

Time should be set aside each month to go over two or three major safety concerns. Obviously, changes should be made before an accident or exposure happens, but a thorough investigation after the fact can at least determine the cause of an accident or exposure and prevent it from happening again.

**9. Conduct inspections.**

This might be done on a department or facility-wide basis. For the inspections to be worthwhile, they should be complete and involve both worker and management committee members. Health and safety questions should be asked of the employees in the areas being inspected.

## Summary

---

1. The most effective committee structure provides employees with a formal “window” to discuss their health and safety concerns.
2. The health and safety committee should have representatives from all major departments, shifts, and work groups.
3. Management needs to invest time, energy and resources in the health and safety committee. An informed committee will be able to fulfill its mission.
4. Committees should avoid being steered into pitfalls that drain their energy and make employees in the facility see it as a waste of time.
5. The committee can build credibility by solving problems that are of significant concern to the workers.
6. There are many levels of activity and there are different ways for members to participate in solving problems at your facility. The job of a health and safety committee is to find the tasks and activities suited to the present situation and to increase the level of activity as the group’s work experience, knowledge and commitment grows.
7. Select issues that reflect member concerns and deal with priority items first. Make smaller, easier changes first, building towards larger and more comprehensive changes.
8. Informed and educated health and safety committees function better. Knowledge of the laws, health effects, and consensus standards relating to exposure, chemicals, and health and safety will lend credibility to the committee. There are a number of useful resources that health and safety committees can access for information.
9. There is no set list of activities for a health and safety committee. A really effective committee will be limited only by its imagination and energy.

# EVALUATION

1. How important is this activity for safety committee employees at your facility?

**Please circle one number.**

| Activity Is Not Important |   |   | Activity Is Very Important |   |
|---------------------------|---|---|----------------------------|---|
| 1                         | 2 | 3 | 4                          | 5 |

2. Please **put an "X" by the one fact sheet** you feel is the most important.

|  |   |
|--|---|
| <b>1.</b> Effective Healthcare Facility Health & Safety Committees | <b>6.</b> Improving the Work Environment        |
| <b>2.</b> Other Committees in Healthcare Facilities                | <b>7.</b> Understanding Levels of Activity      |
| <b>3.</b> Committee Structure                                      | <b>8.</b> Health & Safety Problem Solving       |
| <b>4.</b> No Free Lunch  | <b>9.</b> Information Is Power                  |
| <b>5.</b> Common Pitfalls  | <b>10.</b> Health & Safety Committee Activities |

3. Which summary point do you feel is most important?

**Please circle one number.**

| Most Important Summary Point |    |    |    |     |
|------------------------------|----|----|----|-----|
| 1.                           | 2. | 3. | 4. | 5.  |
| 6.                           | 7. | 8. | 9. | 10. |

4. What would you suggest be done to improve this activity?

---



---



---



---



---

## Activity 4: Hazard Mapping

### Purpose

---

To begin the process of analyzing areas in our facility where the risks of accidents and injuries are greatest.

**This activity has one task.**

## **TASK**

---

In your groups chose a scribe and review the factsheets on pages 54-59. The factsheets will help you learn about hazard mapping and how it can be used to help you identify the areas in your facility where the risks of accidents and injuries are greatest.

Then based on your own experience and the factsheets use the sheet of paper and markers and follow steps 1-5 on the next page to help you create your hazard map. Write large and use the entire sheet of paper for your map. Use the factsheets to help you label and describe the specific hazard areas.

**Step 1:**

Make a drawing on the sheet of paper that shows the basic layout of your facility. (See Factsheet 6, page 59 for an example of what a hazard map looks like.)

**Step 2:**

Identify the hazards in each area of the facility using a color-coded circle on the map. (See Factsheets 3-4 on pages 56-57.)

**Step 3:**

Rate each hazard on a scale of 1 to 4 (See Factsheets 3-4 on pages 56-57)

**Step 4:**

Label each hazard with a name or brief description. (See Factsheets 5-6, on pages 58-59.)

**Step 5:**

Based on your map make a list of the hazards that concern you the most and be ready to tell us why these hazards are a concern for your group.

## 1. Use Hazard Mapping to Identify Problems

A Hazard Map is a visual representation of the workplace that identifies where there are hazards that could cause injuries. For example, a hazard map might look at the following:

- Physical hazards
- Frequency of exposures
- Levels of exposures
- A specific chemical
- Specific workers or job classifications most likely to be exposed

### **Hazard Maps and Worker Experiences**

Hazard mapping draws on what workers know from on-the-job experience. The hazard mapping approach works best when conducted by a small group of workers from the same department or work area.








## 2. Why Hazard Mapping?

Hazard mapping can help you identify occupational safety and health hazards. If your workplace has other ways or approaches for identifying hazards, they can be included in your hazard map.

The point of hazard mapping is to gather the knowledge about hazards from your co-workers so you can work together to eliminate and/or reduce the risks of accidents and injuries.






Hazard mapping respects the vast array of skill, experience and knowledge that workers have about their jobs. Hazard mapping requires working together to identify, prioritize and solve problems.

### 3. Labeling

| Hazard Code Key  |        |   |
|--|--------|---|
|   | Blue   | <b>Electrical Hazards</b>   |
|   | Green  | <b>Chemical Hazards</b>   |
|   | Orange | <b>Physical Hazards</b> (heat, noise, air quality, slippery floors, poor lighting, poorly designed work stations, etc.) |
|   | Brown  | <b>Flammable/Explosive Hazards</b>  |
|  | Black  | Other Hazards (specify)   |

| Level of Hazard |                  |
|-----------------|------------------|
| 1               | Low Hazard       |
| 2               | Medium Hazard    |
| 3               | High Hazard      |
| 4               | Very High Hazard |

## 4. Examples of Hazard Mapping Labels

| Hazard Codes and Levels of Hazards  |        |  |
|---|--------|--|
|  | Blue   | <b>Electrical</b> —Medium Hazard             |
|  | Green  | <b>Chemical</b> —High Hazard                 |
|  | Orange | <b>Physical</b> —Medium Hazard               |
|  | Brown  | <b>Flammable/Explosive</b> —Very High Hazard |
|  | Black  | Other—Low Hazard                             |

## 5. Examples of Hazard Mapping

Before you begin developing your map, think about where the hazards may exist in your facility.

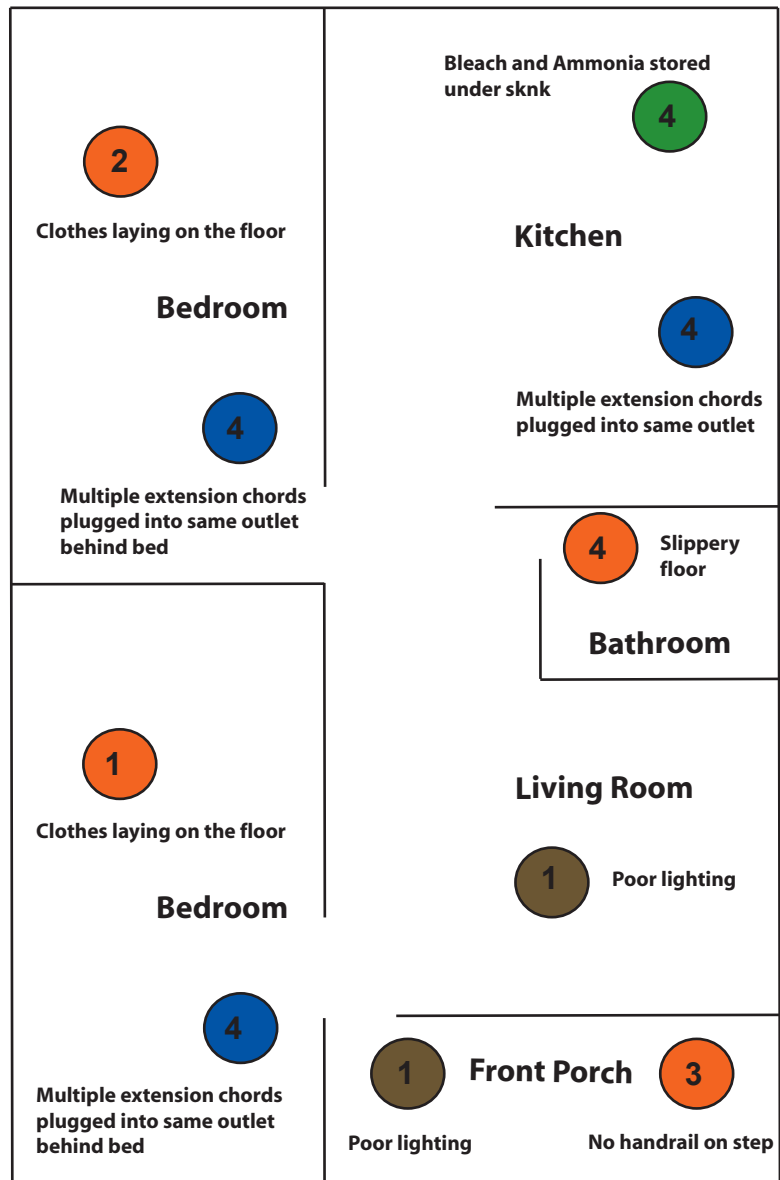
| <b>Potential Facility Hazards</b> |   |
|-----------------------------------|---|
| ✓                                 | <b>Docks:</b> Injuries happen here when forklifts run off the dock, products fall on employees or equipment strikes a person.   |
| ✓                                 | <b>Forklifts:</b> About 100 employees are killed and 95,000 injured every year while operating forklifts in all industries. Forklift turnovers account for a significant percentage of these fatalities.                              |
| ✓                                 | <b>Conveyors:</b> Workers can be injured when they are caught in pinch points or in the in-going nip points, are hit by falling products or develop musculoskeletal disorders associated with awkward postures or repetitive motions. |
| ✓                                 | <b>Materials Storage:</b> Improperly stored materials may fall and injure workers   |
| ✓                                 | <b>Chemicals:</b> Chemical burns and/or exposures are possible if spills of hazardous materials occur.  |
| ✓                                 | <b>Forklift Charging Stations:</b> Fires and explosion risks are possible unless proper guidelines are followed.  |
| ✓                                 | <b>Poor Ergonomics:</b> improper lifting, repetitive motion or poor design of operations can lead to musculoskeletal disorders in workers.  |
| ✓                                 | <b>Other Hazards:</b> Inadequate fire safety provisions, improper use of lockout procedures and failure to wear personal protective equipment also create hazards in the workplace.   |

Source: Occupational Safety and Health Administration (OSHA), *Worker Safety Series, Warehousing*, <http://www.osha.gov/Publications/warehousing.html>

## 6. Example of a Home Hazard Map

-  Electrical Hazard
-  Chemical Hazard
-  Physical Hazard
-  Ergonomic Hazard
-  Other Hazard

| Level of Hazard |                  |
|-----------------|------------------|
| 1               | Low Hazard       |
| 2               | Medium Hazard    |
| 3               | High Hazard      |
| 4               | Very High Hazard |



## Summary

---

1. A Hazard Map is a visual representation of the workplace where there are hazards that could cause injuries.
2. Hazard mapping can help you identify occupational safety and health hazards.
3. The point of hazard mapping is to gather the knowledge about hazards from your co-workers so you can work together to eliminate and/or reduce the risks of accidents and injuries.

# EVALUATION

1. How important is this activity for safety committee members at your facility?

**Please circle one number.**

| Activity Is Not Important |   |   | Activity Is Very Important |   |
|---------------------------|---|---|----------------------------|---|
| 1                         | 2 | 3 | 4                          | 5 |

2. Please **put an "X" by the one fact sheet** you feel is the most important.

|  |                                      |
|--|--------------------------------------|
| 1. Using Hazard Mapping to Identify Problems | 4. Examples of Hazard Mapping Labels |
| 2. Why Hazard Map?                           | 5. Identifying Areas of Concern      |
| 3. Labeling                                  | 6. Example of a Home Hazard Map      |

3. Which summary point do you feel is most important?

**Please circle one number.**

| Most Important Summary Point |    |    |  |  |
|------------------------------|----|----|--|--|
| 1.                           | 2. | 3. |  |  |

4. What would you suggest be done to improve this activity?

---



---



---



---



---





---

## **Activity 5: Systems of Safety**

### **Purpose**

---

To introduce systems of safety and accident prevention.

**This activity has one task.**

## TASK

---

Shortly after midnight on March 24, 1989, the tanker Exxon Valdez ran aground on Bligh Reef in Alaska, spilling 11 million gallons of crude oil. Over 1,500 miles of shoreline were polluted by the spill. Responsibility for the incident was initially placed on the tanker captain, who had been drinking earlier that evening. Captain Hazelwood was disciplined, sued and fired. Further investigation of the accident revealed the following facts:

- a. The radar station in the city of Valdez, which was responsible for monitoring the locations of tanker traffic in the treacherous waters of Prince William Sound, had replaced its radar with much less powerful equipment. The location of tankers could not be monitored in the area of Bligh Reef.
- b. Congressional approval of the Alaskan oil pipeline and tanker transport network included an agreement by the oil corporations to build and use double-hulled tankers. This would significantly reduce the amount of oil released in an accident. In order to save money, the oil industry generally abandoned the agreement. The Exxon Valdez did not have a double hull.
- c. Crew fatigue was typical on the tankers. In 1977, the average oil tanker operating out of Valdez had a crew of 40 people. By 1989, crew size had been cut in half. Crews routinely worked 12- to 14-hour shifts plus extensive amounts of overtime. The Exxon Valdez had arrived in port at 11 p.m. the night before. The crew was rushing to get loaded for departure the next evening.
- d. State-of-the-art equipment for monitoring icebergs in shipping lanes was promised by the oil industry, but it was never installed. The Exxon Valdez was traveling outside the normal sea lane in order to avoid icebergs that were thought to be in the area.
- e. Although the Coast Guard at Valdez was assigned to conduct safety inspections of the tankers, it did not perform these inspections. Its staff had been cut by one-third.

- f. Tanker crews relied on the Coast Guard to plot their location continually. Although the Coast Guard operating manual required this, the area Coast Guard Commander decided it was no longer needed and discontinued tracking the ships all the way out to Bligh Reef. Tanker crews were never informed of the change.
  
- g. Spill response teams and equipment were not maintained. This seriously impaired attempts to contain and recover the spilled oil.

*(continued)*

## **TASK** *(continued)*

---

**Review the factsheets on pages 68-76. Then in your groups list the safety systems and subsystems that are flawed in each paragraph above.** (Factsheet 1 defines Systems of Safety. Factsheets 2-7 explain each of the systems. Factsheet 8 includes a chart showing all the systems and examples of sub-systems.) **You can list more than one failed system or sub-system for each paragraph.**

| <b>Flawed System(s) and Sub-System(s)</b>                                 |
|---|
| <b>1. System(s): Design/Engineering</b><br><b>Subsystem(s): Equipment</b> |
| <b>2. System(s):</b><br><b>Subsystem(s):</b>                              |
| <b>3. System(s):</b><br><b>Subsystem(s):</b>                              |
| <b>4. System(s):</b><br><b>Subsystem(s):</b>                              |
| <b>5. System(s):</b><br><b>Subsystem(s):</b>                              |
| <b>6. System(s):</b><br><b>Subsystem(s):</b>                              |
| <b>7. System(s):</b><br><b>Subsystem(s):</b>                              |
| <b>8. System(s):</b><br><b>Subsystem(s):</b>                              |

# 1. Systems of Safety

When we think about safety we usually focus on injuries and fatalities suffered by individual workers. We generally don't spend much time thinking about the safety systems that exist.

**A system of safety can be defined as the use of specific labor/management programs that actively seek to identify and control hazards (a proactive system). This begins in the conceptual (planning) phase of a new project or work application and continues throughout the entire process.**

| Major Systems of Safety     |
|-----------------------------|
| Design & Engineering        |
| Mechanical Integrity        |
| Mitigation Devices          |
| Warning Devices             |
| Training and Procedures     |
| Personal Protective Factors |

There are many sub-systems that make up these major systems of safety. For example, recordkeeping (including the OSHA 300 Log) would be a sub-system of work practice controls/procedures.

You may have additional systems of safety at your site. They may be organized differently and have different names, but all of our facilities have systems of safety in place.

Source: Adapted in part from Harold Roland and Brian Moriarty, *System Safety Engineering and Management*, New York: John Wiley and Son, 1983.

## 2. The Design/Engineering System

Many important safety decisions are made long before employees are asked to use new equipment or implement new and improved work practices. A central purpose of the design/engineering system of safety is to eliminate hazards through effective work organization, resource allocation, and the selection of safer or lower-risk equipment, chemicals, and machinery. The design system of safety is the place where primary prevention takes place.

### **Organizational and Technical Components**

The **organizational** components of Design and Engineering involve how work is organized and the roles people play. They include:

- Staffing levels
- How resources are used
- How work is assigned and coordinated

The **technical** components of Design and Engineering involve the machinery and processes of work. They include:

- Process and equipment design and engineering (including redesign)
- Selection of machinery, chemicals and other materials
- Ergonomic design of equipment and control panels
- Reducing the inventory of hazardous materials

Sources: Occupational Safety and Health Administration (OSHA) *Revisions to OSHA's Bloodborne Pathogens Standard Technical Background and Summary*, April, 2001. Nicholas Ashford, *The Encouragement of Technological Change for Preventing Chemical Accidents*, Environmental Protection Agency, 1993.

### **3. The Mechanical Integrity System**

Properly designed equipment can become unsafe if it isn't appropriately maintained, inspected and repaired. An effective mechanical integrity system should be evaluated based on its performance in eliminating the use of breakdown maintenance.

Important elements of the maintenance and inspection system include:

- safety and skills training for employees and subcontractors involved in installing, maintaining, repairing or inspecting equipment
- maintaining regular preventive maintenance schedules
- keeping spare parts readily available
- adequate staffing to eliminate work order and preventive maintenance backlogs
- employee involvement in developing and overseeing this system
- written procedures for each task performed
- use of proper materials, equipment, tools and spare parts, including use of a quality control program



## **4. The Mitigation System**

The mitigation system of safety involves the use of equipment that automatically acts to control or reduce the adverse consequences of hazardous incidents. Mitigation devices do not require any action on the part of employees in order for the equipment to function.

The mitigation system provides opportunities for secondary prevention. Mitigation equipment does not eliminate hazards; it only controls the severity of incidents.

Typical examples of mitigation devices include:

- Relief valves
- Automatic shutdown devices
- Mechanical ventilation
- Automatic trip devices
- Machine guards

## **5. The Warning System**

The warning system of safety includes the use of devices that warn employees that a dangerous or potentially dangerous situation is occurring. These warning components require employee intervention to control or mitigate the hazardous situation. Employees must be able to understand the meaning of the warning. They must also be able to respond in a timely manner and understand what actions are necessary.

Examples of warning devices include:

- Fire, spill and evacuation alarms
- Back-up alarms on vehicles

## **6. The Procedures and Training System**

The operation and maintenance of processes that are dangerous require a system of written procedures and training. The greater the hazard, the greater the need for procedures and training.

Parts of an effective procedures and training system include:

- Procedures and training which consistently incorporate the philosophy that safety is more important than production
- Employee involvement in developing and overseeing training and procedures activities
- Methods developed by the technical and manufacturing workforce to certify that training is understood, promotes safety, and is not punitive
- An emergency response plan and training that are in place and are routinely practiced
- Procedures and training which identify all potential hazards, the possible consequences of these hazardous conditions and the actions needed to respond to each hazard or potential hazard

## 7. Personal Protective Factors

Personal protective factors are the last line of defense among the various systems of safety. They define the traditional roles that employees play in health and safety and generally include obeying the rules (individual behavior) and wearing Personal Protective Equipment (PPE). Unfortunately in far too many situations PPE and behavior are used to compensate for hazards that are built into the work process.

### **Being Proactive**

A better approach is to view the role of employees as proactive and engaged in the process of making the workplace a safe and healthy environment. This perspective requires employees to look critically at the workplace, work together to identify the hazards and then contribute ideas, experience and know-how to correct the system flaws.

**Hazards can be eliminated or significantly reduced when employees are actively engaged in the process of identifying systems flaws and correcting them using higher-level solutions such as Design and Engineering.**

## 8. Safety Systems and Sub-Systems

| Safety Systems            | Design/ Engineering   | Maintenance & Inspection  | Mitigation Devices   | Warning Devices   | Procedures & Training   | Personal Protective Factors  |
|---------------------------|---|---|--|---|---|--|
| <b>Type of Prevention</b> | <b>Primary</b><br>(Goal is to eliminate or prevent hazards)   | <b>Secondary</b><br>(Enhances prevention and minimizes hazards)   | <b>Secondary</b><br>(Enhances prevention and minimizes hazards)                                | <b>Secondary</b><br>(Enhances prevention and minimizes hazards) | <b>Secondary</b><br>(Enhances prevention and minimizes hazards)                                       | <b>Last Line of Defense</b><br>(Protects—to some degree—after other systems fail to control) |
| <b>Safety Sub-System</b>  | <b>Technical</b><br>Codes<br>Standards<br>Recordkeeping<br>OSHA 300 Log<br>Guidelines that address Design and Engineering<br>Chemical Substitution<br>Design and Engineering of equipment, materials and processes<br><b>Organization</b><br>Communications<br>Staffing<br>Workload<br>Resource Allocation<br>Shift Schedules | Inspections<br>Preventive Maintenance<br>Parts<br>Quality Control | Shutdown Devices<br>Back-up Generator System and Emergency Outlets<br>Fire Suppression Devices | Monitors<br>Facility Alarms<br>Process Alarms                   | Operating Manuals<br>Safety Information<br>Emergency Response<br>Refresher Training<br>Communications | Personal Decision Making and Actions<br>Personal Protective Equipment (PPE)                  |

## 9. Symptoms, Systems and Root Causes

When we look at the causes of an injury, accident or exposure we have to look beyond employee behavior. Unsafe acts, unsafe conditions and accidents are symptoms of failed systems of safety. System failures are the “root” causes of accidents and exposures.

There are almost always several root causes involved in an incident, accident or exposure. For example, the root causes of an accident might include improperly designed or maintained equipment, poor procedures or inadequate training. Root causes are always found in safety systems. Effective prevention of similar incidents requires changing and improving the systems.

### Examples of Root Causes

- Poor design of equipment
- Poor installation of containers/equipment
- Difficult access to equipment
- Lack of preventive maintenance or inspection
- Inadequate procedures or training for both normal and emergency situations
- Work schedules that create excessive employee fatigue
- Inadequate staffing levels

Sources: Occupational Safety and Health Administration (OSHA) Revisions to OSHA’s Bloodborne Pathogens Standard Technical Background and Summary, April, 2001. Center for Chemical Process Safety, *Guidelines for Investigating Chemical Process Incidents*, New York: American Institute of Chemical Engineers, 1992.



## Summary

---

1. Creating and maintaining proactive systems of safety are the key to preventing injuries.
2. Proactive systems of safety are the key to preventing accidents and exposures.
3. Major systems of safety include:
  - Design/Engineering
  - Maintenance and Inspection
  - Mitigation Equipment
  - Warning Devices
  - Procedures and Training
  - Personal Protective Factors
4. The design/engineering system can provide primary prevention by eliminating the possibility of a serious accident or exposure. The other systems of safety provide secondary prevention by reducing the probability, or severity, of an accident or exposure.
5. Your workplace may have different structures and names for its systems of safety, but all workplaces have systems of safety.
6. Active management and employee involvement are essential for these systems to be effective.
7. Unsafe acts, unsafe conditions and accidents are symptoms of failures in systems of safety. System failures are the “root” causes of accidents and exposures. Effective prevention of similar incidents requires changing and improving the systems.



# EVALUATION

1. How important is this activity for safety committee members at your facility?  
**Please circle one number.**

| Activity Is Not Important |   |   | Activity Is Very Important |   |
|---------------------------|---|---|----------------------------|---|
| 1                         | 2 | 3 | 4                          | 5 |

2. Please **put an "X" by the one factsheet** you feel is the most important.

|   |  |
|---|--|
| <b>1.</b> Systems of Safety               | <b>6.</b> The Procedures and Training System |
| <b>2.</b> The Design/Engineering System   | <b>7.</b> Personal Protective Factors        |
| <b>3.</b> The Mechanical Integrity System | <b>8.</b> Safety Systems and Sub-Systems     |
| <b>4.</b> The Mitigation System           | <b>9.</b> Symptoms, Systems and Root Causes  |
| <b>5.</b> The Warning System              |  |

3. Which summary point do you feel is most important?  
**Please circle one number.**

| Most Important Summary Point |    |    |    |    |
|------------------------------|----|----|----|----|
| 1.                           | 2. | 3. | 4. | 5. |
| 6.                           | 7. |    |    |    |

4. What would you suggest be done to improve this activity?

---



---



---



---



---



## **Activity 6: Writing Action Plans**

### **Purpose**

---

To write action plans for the health and safety committee.

**This activity has two tasks.**

## **TASK 1**

---

In your groups, make a list of the top 10 health and safety concerns at your facility. After you've created your list review the factsheets on pages 84-86. Then based on the factsheets and your own experience prioritize your list of concerns in terms of which problems should be solved first, second, third, etc.

### **Your Top 10 Health and Safety Concerns**

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

**Your Prioritized List of Top 10 Health and Safety Concerns**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

# 1. Why Should You Do Action Planning?

Action planning is a process that can help a committee get from where it currently is to where it wants to go. In other words, action planning will increase your chances of success.

The process will enable you to utilize limited resources efficiently and ensure that you focus your energy in areas that yield the best results. It will provide you with opportunities to involve others, which will strengthen your organization and increase the chances of success.

| <b>Basic Concepts of Planning</b> |   |
|-----------------------------------|---|
| ✓                                 | Planning is a conscious, deliberate process   |
| ✓                                 | Planning is nearly impossible in the middle of a crisis   |
| ✓                                 | Planning is most effective when those responsible for implementing the plan are involved in developing the plan |
| ✓                                 | Planning should be flexible and adapt to changed circumstances  |
| ✓                                 | Planning should never become an excuse for inaction   |
| ✓                                 | Nothing ever goes precisely according to plan   |

## **2. Where Should the Committee Start?**

Your health and safety committee needs to represent the workforce by actively seeking their input and providing them with an opportunity to voice their concerns. This can be done by conducting an informal survey and creating a list of the top 10 employee health and safety concerns.

### **Prioritize Your List**

The next step is to prioritize the list. This is one of the most difficult tasks facing an effective safety and health committee. Issues that co-workers are concerned with may not be the same issues that the health and safety committee would tackle first. For instance, the committee may be very interested in indoor air quality, but co-workers may be more interested in equipment repairs. The equipment repairs should be addressed first.

### **3. Ask the Right Questions**

The critical first step in prioritizing your list is asking the right questions and they may include:

- What problems are of greatest concern?
- What problems affect the most employees?
- What problems are employees ready to take action on?
- What problems have caused the most injuries or illnesses?
- What problems are covered by existing laws or regulations?
- What problems can be easily solved?
- What problems are more difficult to solve and/or require the gathering of more information before they can be acted on?

The answers will help prioritize your list and provide a sense of direction for the committee. If your committee is just getting started it's better to address the smaller, more easily solved problems first. From small beginnings, tougher issues can be solved. As your committee gains confidence and credibility it will be able to take on the more difficult issues.





## **TASK 2**

---

In your groups, review the factsheets on pages 90-97. Then working together, use the worksheet on the next page to develop an action plan for eliminating or reducing one of the hazards/problems from your prioritized list.

## Action Plan Worksheet

| <b>Problem:</b>                |                    |              |                             |            |                 |  |
|--------------------------------|--------------------|--------------|-----------------------------|------------|-----------------|--|
| <b>Safety System Failures:</b> |                    |              |                             |            |                 |  |
| <b>Goal:</b>                   |                    |              |                             |            |                 |  |
| Phase 1 (P1) Objective Number  | Objectives (Steps) | Assigned To: | Resources Required (Amount) | Start Date | Completion Date |  |
| P1-1                           |                    |              |                             |            |                 |  |
| P1-2                           |                    |              |                             |            |                 |  |
| P1-3                           |                    |              |                             |            |                 |  |
| P1-4                           |                    |              |                             |            |                 |  |
| P1-5                           |                    |              |                             |            |                 |  |
| P1-6                           |                    |              |                             |            |                 |  |
| P1-7                           |                    |              |                             |            |                 |  |

## 4. Establish Measurable Goals

The goals you establish for your committee are critical to its success. Setting goals will motivate committee members and give concrete meaning to the committee's mission.

### Long-Term Goals (Outcomes)

In order for goals to motivate people they must be measurable and specific.

**Ask yourself: What needs to be done to correct this problem? The answer to this question becomes your goal!**

|   |
|---|
| <b>Problem:</b><br>Too Many slips, trips and falls                                  |
| <b>System Failures:</b><br>Design and Engineering, Training and Procedures          |
| <b>Goal:</b><br>Reduce the number of slips, trips, or falls throughout the facility |

With clearly defined tangible goals you can set targets that are consistent with your committee's mission. Equally important, the people who are responsible for getting things done will take ownership of the process and ensure that the goals are met.

## 5. Write Clearly Defined Objectives (Steps)

In order to reach your goals you must complete specific objectives (steps) that position and drive your committee in the right direction. Your objectives must be as clear and specific as your goals.

An objective written as “Increase employees’ knowledge about the hazards of needlesticks” is too general. You need to be specific. To avoid confusion and minimize the chances that objectives are not met, all assignments should be clearly stated and understood by everyone. Objectives should contain measurable results that are understood and timely. In other words, you have to specifically say what it is you want to do and when you are going to do it.

| <b>Phase 1 (P1)<br/>Objective<br/>Number</b> | <b>Objectives<br/>(Steps)</b>   |
|--|---|
| P1-1   | Gather data on slip, trip and fall hazards in facility from the following sources: <ul style="list-style-type: none"> <li>• OSHA 300 Logs</li> <li>• National Union</li> <li>• NIOSH</li> <li>• OSHA</li> </ul> |
| P1-2   | Get slip, trip and fall hazards listed as a priority issue at next joint health & safety committee meeting  |
| P1-3   | Create a Slip, Trip and Fall Hazards Health and Safety Factsheet  |
| P1-4   | Distribute the Slip, Trip and Fall Hazards Health and Safety Factsheet to all workers in the facility   |
| P1-5   | Print the Slip, Trip and Fall Hazards Health and Safety Factsheet in the Union Newsletter and the facilities Quarterly Review   |
| P1-6   | Get the joint health and safety committee to agree to conducting 2-hour slip, trip and fall hazards training for all employees  |
| P1-7   | Get joint health and safety committee to form a Slip, Trip and Fall Hazards Training sub-committee that will be responsible for overseeing the development of the training curriculum                           |

## 6. Who Will Do the Work?

At this point, if you've provided everyone on the committee with an opportunity to participate in the planning process, then they should be strongly committed to the plan and the tasks that must be completed in order to succeed.

However, while everyone may be enthusiastic and want to participate, it is extremely important that the right person or persons be selected to complete each task.

Choosing the right person for the right job will require taking several factors into consideration including:

- **Time:** Make sure the person doing the work has enough time in their schedule to successfully complete the task or project.
- **Skills:** The person should have the necessary skills and ability to complete the task.
- **Team Leadership:** If you are working in teams, it is important that someone be designated as the team leader. The team leader must have the leadership qualities that will ensure the team's success.
- **Commitment:** Above all else, the person who takes on the responsibility of completing a specific task or project must be committed to the plan, the joint health and safety committee, and its mission.

## **7. When Will the Work Be Completed?**

A good action plan includes clearly defined deadlines for the tasks that must be completed by members of the committee. The trick is in making sure you set realistic deadlines. Setting deadlines that can't be met will not only increase the chances that the committee fails, it will also negatively affect morale.

### **How to Make a Good Estimate of Time**

One of the most effective ways to get a realistic estimate of the time is simply to ask those who will be doing the work to make the estimate. This approach actually does more than establish a realistic time frame for completing a task. Specifically, it can help you achieve buy-in from the people who have to do the work.

If you don't use this approach there's a possibility that people will resist and the plan will have to be revised.

## 8. Resources

If you want to accomplish something you have to pay for it. Money is the critical resource that must be directly linked to the planning process. In short, you need to figure out how much money you need to execute your plan, when you'll need the money, and whether you have enough to complete each task and achieve your goal.

### **Price Out the Plan**

Determining how much money you need should not be difficult. If you've followed all the planning steps up to this point, all the information you will need to make an accurate estimate should be right in front of you. It should be as simple as identifying all the action plan items that have money associated with them and adding up the dollars.

### **Prioritize Action Plans**

In situations where you have budget shortfalls, you may be able to eliminate non-essential steps that free up cash for the completion of critical tasks that keep the committee moving forward.

You may also consider extending the completion time of specific tasks in order to reach your goal. Finishing in 15 months instead of 12 is still far better than not reaching your goal. However, if you can't fund a plan through to completion or to an acceptable time of completion, then it's best to put it aside and review it at a later date.



## 9. Write It All Down on Paper!

Most planning experts agree that committees or organizations who stop after developing their goals and objectives rarely accomplish them. That's because without a clearly written plan of action it's highly unlikely that anyone will take it upon themselves to complete the objectives.

| <b>Action Plan Checklist</b> |   |
|------------------------------|---|
| ✓                            | Form an action plan committee   |
| ✓                            | Develop an action plan outline  |
| ✓                            | Expand the outline; brainstorm the steps and resources                  |
| ✓                            | Put the steps in sequence; write the first draft                        |
| ✓                            | Let the draft sit for a week and then review it again                   |
| ✓                            | Distribute the second draft to your committee's leadership for feedback |
| ✓                            | Using feedback write the final draft for your committee's approval      |

*(continued)*

## 9. Write It All Down on Paper! *(continued)*

### Action Plan Worksheet

| <b>Problem:</b><br>Too many slips, trips and falls                         |  |                             |                                     |            |                 |  |
|--|--|-----------------------------|-------------------------------------|------------|-----------------|--|
| <b>System Failures:</b><br>Design and Engineering, Training and Procedures |  |                             |                                     |            |                 |  |
| <b>Goal:</b><br>Reduce the number of needlesticks throughout the facility  |  |                             |                                     |            |                 |  |
| Objective Number   | Objective (Steps)  | Assigned To:                | Resources Required (Amount)         | Start Date | Completion Date |  |
| P1-1   | Gather data on needlestick hazards ifrom the following sources:<br><ul style="list-style-type: none"> <li>• OSHA</li> <li>• National Union</li> <li>• NIOSH</li> <li>• OSHA 300 Log</li> </ul> | Joe (Team Captain) and Fran | 2 Days of Lost time wages: \$400.00 | 11/02      | 12/02           |  |
| P1-2   | Get Slip, Trip and Fall Hazards listed as a priority issue at next joint health & safety committee meeting   | Frank                       | None                                | 11/02      | 11/02           |  |
| P1-3   | Create a Slip, Trip and Fall Hazards Health and Safety Factsheet   | Phil and Michele            | 2 Days of Lost time wages: \$400.00 | 11/02      | 1/1/03          |  |

## **10. Planning Never Ends**

The first time you do action planning it will seem time consuming. And once you are finished and begin implementing the plan there will be a natural tendency to leave the process behind. But as long as your world is changing—and it always will be—you will need to evaluate your current position and if necessary do more planning.

### **When Things Don't Go According To Plan**

The real advantage of action planning is that when things don't go according to the plan, or if your committee starts to drift or lose its focus, you will be well positioned to go back through your action plans and determine where you made a mistake or how you can get yourself back on course with your original goals and objectives. In the absence of planning, you will be hard-pressed to figure out where you made a mistake or how you can re-focus and put your committee back on course.

## Summary

---

1. Action planning is a process that can help a committee get from where it currently is to where it wants to go. It will increase your chances of success.
2. Your health and safety committee needs to represent the workforce by actively seeking their input and providing them with an opportunity to voice their concerns.
3. Once you have identified member health and safety concerns you must prioritize the list.
4. When you solve a problem you are setting a goal for your committee. In other words you ask yourself: **What needs to be done to correct this problem? The answer to this question becomes your goal!**
5. In order to reach your goals you must complete specific objectives (steps) that position and drive your committee in the right direction. Because you want to accomplish something your objectives must be as clear and specific as your goal.
6. Once you have identified the objectives (steps) that will lead to accomplishing your goal, it is extremely important that the right person or persons be selected to complete each objective.
7. Set realistic timelines for the completion of each objective.
8. Figure out how much money you need to execute your plan and when you'll need the money.
9. Put your plan in writing and include all the details.
10. You should always be reviewing your plan and when it is necessary, revise and update it.

# EVALUATION

1. How important is this activity for safety committee members at your facility?

**Please circle one number.**

| Activity Is Not Important |   |   | Activity Is Very Important |   |
|---------------------------|---|---|----------------------------|---|
| 1                         | 2 | 3 | 4                          | 5 |

2. Please **put an "X" by the one factsheet** you feel is the most important.

|  |   |  |                                     |
|--|---|--|-------------------------------------|
|  | 1. Why Should You Do Action Planning?       |  | 6. Who Will Do the Work?            |
|  | 2. Where Should the Committee Start?        |  | 7. When Will the Work Be Completed? |
|  | 3. Ask the Right Questions                  |  | 8. Resources                        |
|  | 4. Establish Measurable Goals               |  | 9. Write It All Down on Paper!      |
|  | 5. Write Clearly Defined Objectives (Steps) |  | 10. Planning Never Ends             |

3. Which summary point do you feel is most important?

**Please circle one number.**

| Most Important Summary Point |    |    |    |     |
|------------------------------|----|----|----|-----|
| 1.                           | 2. | 3. | 4. | 5.  |
| 6.                           | 7. | 8. | 9. | 10. |

4. What would you suggest be done to improve this activity?

---



---



---



---



---



---

## **Activity 7: Evaluating the Workshop**

### **Purpose**

---

To evaluate the health and safety workshop that we have just completed and to spend some time talking about where we go from here.

**This activity has one task.**





**3. How would you rate the workbook's readability?**

- Too hard
- Just right
- Too easy

**4. What health and safety topics would you like to learn more about?**

**5. Of all the activities, which was your favorite? Why?**