10-Step Business Plan for Safety

A Guide for Developing Organizational Excellence
in Safety and Health Management

Ohio | **Bureau of Workers' Compensation**

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10-Step Business for Safety Plan —
A Guide for Developing Organizational Excellence
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Section I - **Introduction**

Accident prevention will be most effective when every employee values and takes responsibility for safe job performance.

To get employees to work safely and participate in safety management, safety programs must do more than require compliance. They must incorporate cultural change and stress behavior adjustment.

The payoff
 A culture where all members of the organization actively manage workplace safety and health.

The results
 • Increased economic value for the organization
 • Reduced workers' compensation costs
 • Increased safety awareness
 • Increased employee ownership for success
 • Enhanced communication and trust
 • Lasting change in the culture

The 10-Step Business Plan for Safety is an integral part of the following BWC alternative rating plans:
 • Drug-Free Workplace Program (DFWP)
 • Drug-Free EZ Program (DF-EZ)
 • Individual-Retrospective-Rating Plan
 • EM Capping

How to use this manual

We have developed the 10-Step Business Plan for Safety with the goal of helping your company develop a culture where all members of the organization actively manage workplace safety and health. Use this manual and the 10-Step Business Plan for Safety as a framework for your organization's safety program.

Successfully managing inherent hazards pertaining to your company requires all staff members understand the value placed on safety and health by the organization's leadership, understand their individual performance responsibilities and continue to acquire knowledge in safety and health.

Integrating the 10-Step Business Plan for Safety into the way you conduct business will help you develop a new safety culture and identify safety as a core organizational value.

The manual's first section introduces the 10-Step Business Plan for Safety and discusses reasons for developing sound safety-and-health management approaches to accident prevention and cost containment. Section II defines each step of the 10-Step Business Plan for Safety and includes requirements and additional implementation suggestions. The third section includes the resources to help you find additional information in specific areas.

The 10-Step Business Plan for Safety Check List, is for your internal use in tracking your progress toward developing accident-prevention systems and processes.

Investing in an effective safety and health process

Ineffective accident prevention leads to occupational injuries and illnesses. As a result, workers' compensation insurance costs skyrocket and profits plummet. It is not unusual to see a company with poor injury and illness performance pay three or four times the insurance premium its competitors pay.

The costs of injuries and illnesses include medical bills, rehabilitation costs, disability payments and lost-time benefits. These costs, however, are often just the beginning of expense for the employer. The hidden costs of injuries and illnesses may range from four to 10 times the direct costs.

Indirect costs resulting from injuries include:
• Administrative costs;
• Failure to meet schedules;
• Loss of production/service capability;
• Overhead costs that continue while work is disrupted;
• Spoiled or damaged product;
• Damaged tools and equipment;
• Loss of efficiency due to breakup of crew;
• Cost of training a replacement worker;
• Lost staff time.

On-the-job injuries and illnesses have an adverse effect on both public and employee relations. While a company's safety achievements often go unnoticed, a catastrophic accident people may remember long after the incident.

You can strengthen employee relations by showing employees you sincerely care about them.

Employees feel better about their jobs and about themselves when they have a strong sense that the organization cares. By implementing managed approaches to accident prevention, an employer shows his or her employees that he or she does care. As a result your work force may display improved morale, lower absenteeism and higher productivity.

Correcting unsafe conditions and complying with Occupational Safety and Health Administration (OSHA) regulations do not ensure success in accident prevention. Workers must make decisions to perform their tasks safely. Those decisions are made hundreds of times daily. When the organization's work force truly believes safety is in their best interest, permanent performance improvements occur and safety becomes a core value and part of the organizational culture.

Section I - **10-Step Business Plan**

① Visible, active senior management

Visible senior management leadership within your organization promotes safety management as an organizational value

Requirements

Senior management, including the top executive on-site, must act as role models for how all employees should work to create a safe work environment.

Active leadership includes:
- Authorizing the necessary resources for accident prevention;
- Discussing safety processes and improvements regularly during staff or employee meetings;
- Ensuring management is held accountable for accident-prevention activities and for managing accident-prevention processes;
- Annually assessing the success of the safety process by using surveys, personal interviews and/or behavior-sampling;
- Encouraging employees to take an active part in maintaining a safe workplace.

Implementation

Senior management will establish the importance of safety in all operations. Taking the safety and health lead, management helps in the campaign to reduce accident losses. Senior management's leadership, support and active commitment encourage management and employees to make the safety and health system successful.

Senior management should take these actions to show active leadership in the safety and health processes:
- Issue a written safety policy as a core value of the organization and assign roles and responsibilities;
- Establish both annual and long-term safety goals;
- Include safety as an agenda item in all regularly scheduled business meetings;
- Regularly review progress of the safety and health processes with supervisors and employees;
- Accompany supervisors, safety team members or safety committee members during periodic departmental safety surveys;
- Review and discuss all accident-investigation reports with the supervisor or foreman;
- Present safety recognition awards to deserving employees;
- Openly discuss safety issues with employees during periodic tours or meetings;
- Participate as a student in employee safety training programs;
- Participate in meetings with accident-prevention coordinators;

② Employee involvement and recognition

Employee involvement and recognition afford employees opportunities to participate in the safety-management process

Requirements

To ensure the effectiveness of the program, both management and employees will participate in the safety-and-health management process.

Employee participation opportunities can include:
- Safety and health involvement teams, focus groups, or safety and health committees;
- Accident investigations;
- Safety and health audits;
- Acting as instructors for safety and health training programs.

Recognition opportunities can include:
- Recognizing employees for excellence in accident prevention;
- Recognizing employees for consistently high contribution to safety and health;
- Recognizing employees for their contributions to continuous improvement through participation in problem solving, decision making or perception surveys;
- Recognizing employees who suggest safety and health improvements or complete safety and health projects.

Recognition

Two methods that encourage employees to use safe work practices and to integrate safety into the fabric of their jobs are:

- **Positive safe behavior reinforcement** — recognize employees for their actions in integrating safety into business operations and making the right decisions. Expressing gratitude and complimenting employees for their safe performance encourages continued safe behaviors;

- **Negative safe behavior reinforcement** — discipline employees for their actions and poor decisions. Disciplining discourages unsafe behaviors and decisions, and prevents behaviors in the future.

Implementation

Labor/management safety and health teams facilitate dialogue on safety and health matters between management and non-management employees. The safety involvement team handles problem solving and decision making for safety and health issues confronting the company. Team composition includes management and direct labor employees in roughly equal numbers. Team members represent all areas of the company and participate as equals. Teams may be natural work groups, associated with a single function area or cross-functional and represent a variety of work areas.

Objectives include:
- Prepare and make available records of the safety and health issues, and outcomes discussed during meetings;
- Use recognized problem-solving techniques, like brainstorming, cause-and-effect diagrams, decision analysis, charting, etc., to reach effective solutions;
- Review investigations of accidents and causes of incidents resulting in injury, illness or exposure to hazardous substances, and recommend specific action plans for prevention;
- Recommend specific actions in response to employee safety suggestions;
- Conduct surveys of the safety culture every 12 to 18 months.

The team should meet regularly but not less than quarterly with the facilitator. The facilitator should be a member of the team who schedules the meeting, arranges for a meeting place and notifies members of the meeting. Rotate the facilitation role frequently and share responsibility for other team functions among team members. Record the minutes of each meeting and distribute the minutes to all team members. Post a copy of the minutes on the company safety bulletin board.

Giving the safety team the responsibility to make decisions and the accountability for implementing solutions is important. Empower the team to be responsible for developing and implementing effective safety solutions.

You should use both positive and negative reinforcement to encourage employees to perform their jobs safely. However, the tendency is to dwell on the negative. This leads to fault finding and blaming employees. Thus, safety is perceived as a negative by supervisors and employees. Heavily involving employees and using safe-behavior reinforcement develops a positive approach to managing the safety process.

You may consider asking supervisors to recognize and praise at least one employee each day for following prescribed safe work practices or contributing support to the accident-prevention systems. Recognition costs nothing but is a visible reminder of the importance the supervisor and the organization place on integrating safety into the culture of the organization and into day-to-day operations.

(3) Medical treatment and return-to-work practices

Early return-to-work strategies help injured or ill workers

Medical treatment
Implementation

Quality medical care provided in a timely manner helps injured employees and promotes claims-cost containment. Establishing effective working relationships with health-care providers is crucial for overall success.

Take the following steps to facilitate the medical process and provide early intervention and successful medical management:
- Create effective open lines of communication with a clinic, hospital or physician;
- Educate health-care providers about the nature of your business, its risks and your control strategies;
- Build strong working relationships with health-care providers so each party understands roles, responsibilities and expectations.

Medical treatment
Requirements

Establish a post-injury or disability management policy and procedure.

The policy and procedure will be consistent with the Health Partnership Program (HPP) to help injured or ill employees obtain quality medical care and return to work.

Components of the disability management procedure will include, at a minimum:
- Informing employees of procedures for obtaining medical treatment, including informing employees of the selected managed care organization (MCO);
- Immediate reporting of injuries and illnesses to a supervisor;
- Regular communication with injured or ill employees who are off work;
- Investigation of all injuries or illnesses within 24 hours to identify process and corrective measures;
- When not prohibited by labor agreement, a modified-duty or transitional-work program that allows employees to return to work in a productive capacity during the recuperative period.

Return-to-work
practices/rehabilitation guidelines

Requirements

Establish a pre-injury planning process to help workers minimize the impact of work-related injuries or illness. Components of the pre-injury planning process will include:

- Educating workers and supervisors on safety procedures and acquainting them with the workers' compensation system and company process;
- Developing a company remain-at-work plan that creates a work-site job analysis for each worker or job classification. This documentation provides guidelines for decision making in the development of modified- or transitional-duty programs with the ultimate goal of helping the injured worker remain at work post injury;
- Communicating, monitoring and evaluating the company's remain-at-work plan.

Establish a post-injury or disability-management policy to help injured workers obtain quality medical care and return to work quickly. This return-to-work plan will clearly outline strategies for returning workers to active status after injury or illness as soon as medically feasible.

Components will include:

- A process for the worker to immediately report a work-related injury or illness to his or her supervisor;
- Procedures for the worker to obtain quality, timely medical treatment;
- A procedure for the employer to manage the worker's return to the work site. This includes regular communication with injured employees who are off work;
- A process for the employer to determine the worker's readiness to return to work in conjunction with the worker's medical and/or rehabilitation provider;
- A method for the employer to monitor the worker upon return to work to reduce potential of re-injury;
- A process for the employer to investigate all injuries or illnesses within 24 hours to identify process improvements and corrective measures;
- A course for implementing a modified- or transitional-duty program, when not prohibited by a labor agreement, that allows workers to return to work in a productive capacity during the recuperative period.

Implementation

Taking a proactive approach and establishing effective working relationships with the involved health-care and rehabilitation providers is crucial for overall success. These steps facilitate the medical process and serve as the foundation for early intervention and successful medical management:

Work-site job analysis

A work-site job analysis will be a valuable tool to develop modified or transitional-duty programs. Develop and communicate the work-site job analysis prior to injury. You may use a rehabilitation specialist, such as an occupational therapist, to create the analyses and provide recommendations for physically appropriate modified duties given the injured workers' functional capabilities.

Include the following attributes of the workers' responsibilities in each analysis:

- Job description, including task details;
- Detail of tools and equipment used;
- Work schedule;
- Analysis of physical demands for required tasks;
- Other special demands.

Using the work-site job analysis, you can implement an effective modified- or transitional-duty program. Such a program facilitates a worker's return to work as soon as he or she can work in a productive capacity.

Work closely with the worker's health-care provider, rehabilitation specialist and claim administrator to determine the best possible solution for each individual worker.

This may include:

- Comparing the employee's functional capabilities to the stated job requirements;
- Deciding to what extent you can modify the job;
- Identifying other modified-duty opportunities on a limited or full-time basis, if modification of the worker's original job is not possible.

Expected outcomes of implementing these requirements:

- Reduced time lost from work;
- Reduced productivity loss;
- Improved return-to-work rate;
- Reduced worker re-injury;
- Increased worker satisfaction;
- Reduced costs.

④ Communication

Regular safety-and-health communication keeps employees informed and solicits feedback and suggestions

Requirements

Your organization's approach to managing safety and health will include regular verbal and written communication on matters affecting employee safety and health. Communication will include:

- Quarterly written and/or verbal feedback to all employees on their accident-prevention performance;
- A process for upward and downward communication throughout the organization;
- Communication can include memos, bulletin boards, staff and general meetings;
- Feedback should include the organization's overall safety and health performance.

Implementation

Safety communication is a two-way process between employer and employees. Many traditional safety programs emphasize top-down communication and virtually overlook communication from the bottom up. To have an effective safety program, you must incorporate a bottom-up communication process.

Encourage employees to identify obstacles to safety without fear of reprisal. It is crucial that you develop and nurture a system of open and honest communication for a safety culture to evolve.

Soliciting employee input and participation on safety-and-health matters will do more than simply help the organization communicate more effectively.

Encouraging employees to share their ideas and concerns on safety-and-health matters. Asking them for their help in decision-making and problem solving will help them not only feel in on things, but actually contribute to successful outcomes. High morale and productivity also result.

Communication with employees needs to be easily understood. If you have languages other than English spoken in your facilities, communicate safety and health information to employees in the language they understand. In addition, some employees may not read, requiring verbal communication.

Whatever communication strategies you use, it is important that employee concerns and suggestions receive timely and appropriate responses. It also is important that employees feel they are being heard and that their opinions matter.

The following communication ideas will help you design your communication systems and processes:

- One-on-one discussion — the supervisor, foreman or team leader sits down with each employee on a scheduled basis to discuss safety concerns, suggestions and ideas. Dialogue can last from 10 minutes to one hour. Ideally, you should hold discussions monthly;
- Informal discussion — inform employees that the accident-prevention coordinator, supervisor and/or team leader is available to discuss confidentially their safety and health questions, problems and suggestions;
- Suggestions — establish a safety-and-health suggestion program. Install a safety suggestion box in the work area and ask employees to contribute their comments and suggestions. Consider providing a form for employees to use when submitting their suggestions;
- Group discussion — provide the opportunity for executives, supervisors, team leaders and employees to discuss safety issues at employee gatherings. Regularly schedule meetings to share information and seek input on safety and health matters. Meetings can be formal or informal, held in a conference room or on the job site, last long or be done in 10 minutes;
- Written communication — communicate key information, which can be motivational, developmental or informative, in writing;
- In-house company publications — an in-house company newsletter provides accident-prevention information on a regular basis;
- Safety and health booklets — provide safety-and-health information to employees at work or mail to their homes;
- Safety alert notices — inform employees of accident causes and how they can prevent them. Discuss the alert notices with employees, post notices on the safety bulletin board or send them to individual employees;
- Memorandums — summarize discussions and plans, provide information on performance goals and expectations, and give feedback on safety performance;
- Safety bulletin boards — use for posting safety-related policies, notices, articles, meeting schedules, meeting minutes, memos, etc.;
- Safety signs — a constant reminder of safe work practices, dangerous conditions and special precautions. Post safety signs as reminders on machinery, entrances to work areas and in high hazard areas.

⑤ Timely notification of claims

Requirements

You must report claims immediately to the MCO, which reports the claim to us within 24 hours.

You will comply with all requirements for reporting claims to the your MCO as specified under the HPP rules.

Implementation

When an injury occurs, first arrange for medical care for the employee. Next, investigate and document the circumstances, and report the injury to the claim handler.

Reporting claims quickly:
- Demonstrates care and concern for the employee;
- Prevents delays and/or confusion in the claim process;
- Reduces the potential for fraud or abuse;
- Reduces the potential for needless litigation.

Through timely reporting of claims, you:
- Establish an open line of communication;
- Develop accurate information to manage the workers' compensation claim;
- Provide benefits to the injured employee on a timely basis.

⑥ Safety and health process coordination and employer education

Assign the role of coordinating safety efforts for the company

Requirements

Designate an individual as the accident-prevention coordinator. Give that person the responsibility and authority to facilitate organizational safety systems and processes. Ensure he or she develops the knowledge and skills necessary for creating a safer working environment.

The accident-prevention coordinator does not assume operational responsibility for safety and health, but supports line management, supervision and employees to develop effective safety systems and processes.

In addition, the accident-prevention coordinator must attend in person, at least one of our approved safety-and-health management courses yearly. Web-based classes are not acceptable.

Responsibilities include:
- Helping management and employees identify accident-prevention and safety-and-health training needs through perception surveys, interviews, behavior sampling or other similar methods;
- Helping supervisors make changes or develop strategies that improve the organization's safety systems and processes;
- Identifying and communicating new safety-and-health requirements;
- Compiling injury and illness-related records;
- Tracking progress on safety-and-health-related projects;
- Working with employees to optimize safe work practices;
- Attending in person, at least one of our approved safety and health management courses yearly.

You may choose to delegate the accident-prevention coordinator's functions to more than one employee. A small–business owner may assume the duties or have a manager do them in addition to his or her normal management duties. Geographically dispersed companies usually name a local employee as the accident-prevention coordinator. Medium-sized employers often designate a department manager from the human resource, engineering or financial services disciplines as their accident-prevention coordinator.

Larger companies often employ a full-time accident-prevention coordinator. When determining the need for a full-time accident-prevention coordinator, consider the accident history, expenses associated with accidents and the degree of hazard inherent in the operations.

As mentioned, **accident-prevention coordinators must attend at least one of our approved safety-and-health management courses each year to meet the requirements of step 6**. Our Division of Safety & Hygiene offers several seminars that meet this requirement. An employer may select a seminar that best addresses his or her needs. To obtain more information, call 1-800-OHIOBWC, and listen to the options.

The accident-prevention coordinator should be committed to safety and health, employee well-being and have the time, authority and resources to facilitate the company's safety systems and processes. He or she acts as the internal consultant helping the organization make important safety-related decisions.

Attending in person, at least one of our approved courses each year allows the accident-prevention coordinator to:
- Increase expertise in safety systems and processes;
- Renew/refresh thinking on how to develop successful management approaches;
- Provide opportunity to understand how others are coping with similar challenges.

Document all of our approved safety-and-health management courses the accident-prevention coordinator attends. The accident-prevention coordinator is an internal consultant, not a doer. Line managers and supervisors carry out many of the activities that make up the safety and health system. The accident-prevention coordinator provides advice and support to line managers, supervisors and employees regarding safety management responsibilities. An accident-prevention coordinator's specific functions may vary from company to company.

⑦ Written orientation and training plan

Conduct orientation and training for all employees

Requirements

Identify and respond to the specific training needs of your employees, including supervisors, managers and team leaders. Develop a written safety-and-health training plan that documents specific training objectives and instruction procedures.

The safety-and-health training plan will include:
- Company safety and health policy statement;
- Employee responsibilities.

Safety-and-health training will include:
- Hazard communication;
- Bloodborne pathogens, if applicable;
- Specific job/task safe work practices and hazard recognition;
- Recordkeeping.

At a minimum, training must cover:
- Procedures for the safe and efficient use of machinery and tools;
- Ergonomic risk factors, including the prevention of cumulative trauma disorders;
- Chemical hazards and how to prevent contact or exposure;
- If appropriate, procedures for lockout-tagout, hot work permits and confined-space entry.

Implementation

No matter how safe a work environment you provide, the success of your safety-and-health systems depends upon the managers, supervisors, team leaders and employee buy-in of safe work practices.

The goal of any safety and health training program is not just to impart knowledge, but also to change behaviors and improve decision making. Through safety training, employees receive information about hazards, procedures, processes and expected behaviors.

Bureau of Labor Statistics studies have found that 48 percent of all injured workers had been on the job for less than one year. Therefore, you should assume that new employees know little or nothing about the job hazards and processes associated with their job functions.

After your new employees participate in safety orientation, have their supervisors provide them with job-specific safety and health training. Do not permit employees to start a job until they have received instructions on how to perform the work safely. We recommend you give employees at least three days of training to ensure they understand the training and are following the proper procedures.

Other than new employees, participants also will provide training in the following instances:
- Provide employees with a general safety-and-health orientation, and job-specific safety-and-health training, similar to the orientation and training provided to new employees;
- Provide employees who are given a new job assignment or transfer with the same job-specific safety-and-health training as if they were new employees. Often, transferred employees are not given safety training because they are only temporarily filling in for the regular employee. You must train temporary employees, or the potential for an accident increases;
- Conduct safety-and-health training before or at the time of introducing new substances, equipment, processes or procedures. Training may be an informal safety meeting held at the workplace. The training must be responsive to changes in the work environment;
- Provide safety training whenever you identify a new or previously unrecognized hazard. Teach employees who may be exposed to the hazard how to protect themselves. Also encourage employees to report potential hazards immediately.

In addition, it is important to build supervisor and manager competency levels in safety-and-health. As they emphasize and learn more about effective safety-process management, employees are less likely to be injured or become ill from inherent hazards.

Fully document your safety and health training by including the date, topics covered, instructor's name and the names of employees attending the training session. Have employees answer written questions about the content of educational material you presented. This helps provide a sense of importance to the training, measures understanding and retention of the material and documents the effectiveness of the training. It also provides the opportunity for constructive feedback from the employees. Have each employee in attendance sign the documentation form on the day of completion.

⑧ Written and communicated safe work practices

Publish safe work practices so employees have a clear understanding of how to accomplish their job requirements safely.

Requirements

Identify, document and publicize both general and job-specific safe work practices. Provide employees with a copy of the general safe work practices, and have all employees sign a statement indicating they have read and intend to follow the safe work practices.

Examples of general safe work practices expected of employees include:
- Practicing good housekeeping;
- Wearing personal protective equipment;
- Applying first-aid procedures (if trained);
- Using good ergonomic principles;
- Wearing respiratory protection;
- Using and following lockout/tagout procedures;
- Using and following confined-space entry;
- Using hazard communication;
- Avoiding bloodborne pathogens, if applicable.

Job-specific, safe work practices apply to operations that involve recognized hazards and address risks associated with the business. Post or publicize job-specific safe work practices in the work area.

Implementation

Safe work practices are essential for any organization because they prescribe the accepted behavior and practices the employer expects of employees. You may use a safety involvement team to develop an employee safety handbook. Ask employees for their input in composing the handbook. Include general, company-wide safe work practices and specific safe work practices that apply to each department, the company's safety policy or a statement on safety as viewed by the top official of the organization in the safety handbook.

Each department manager, leader, etc., will review the safe work practices with his or her employees on a recurring basis, at least annually.

To help ensure employees read safe work practice handbooks , have your employees sign a statement certifying they have read it, they are familiar with the safety rules and policies outlined in the safety handbook and agree to abide by them. Retain the signed document in the employee's personnel file.

⑨ Written safety and health policy

A written safety-and-health policy signed by the top company official expresses the employer's values and commitment to workplace safety and health

Requirements

Give all new hires a safety-and-health policy document signed by the company's top executive. Communicate the safety-and-health policy to all employees and review it with them on an annual basis. The document will include:

- Managers, supervisors, team leaders and employees' responsibilities regarding the organization's commitment to workplace safety-and-health;
- Commitment to returning injured or ill employees to work at the earliest opportunity.

Implementation

A written safety-and-health policy clearly states the company's commitment to effective safety-process management and to providing a safe working environment.

This may seem to be a minor step, but it is often the start in implementing effective safety-and-health systems and processes. It expresses the commitment to providing and maintaining a safe work environment.

Communicating the organization's commitment to safety is as important as the company's statement on producing quality products. Both statements should be mutually supportive. Consider integrating each statement into one comprehensive policy.

Section II - 10-Step Business Plan for Safety

(10) Recordkeeping and data analysis

Internal program verification through audits, surveys and record analysis assesses the success of company safety

Requirements

Compile injury and illness-related data to:
- Identify safety-and-health process problems;
- Help manage the compensation process;
- Provide information necessary for developing solutions.

Implementation

Good records are an essential component of successful safety-and-health systems. Assessing why accidents occur, what specific systems or processes need changed and how to make changes are this step's goals.

Detailed statistical analysis is not necessary, but comparing injury and illness experience with preceding periods and comparing your results to the results of similar companies is important. Results-oriented data, frequency rates, severity rates and costs of compensation indicate trends. However, these numbers do not reveal system weaknesses, poor decisions or inappropriate behaviors.

Performance-oriented information helps identify system weaknesses and shows you where you need to make improvements. Therefore, it is important to measure and assess the processes by which you obtain results.

The processes may include:
- Conducting perception surveys;
- Assessing the effectiveness of the accountability system;
- Using an observation system that develops information on safe behaviors in the work setting;
- Assessing the effectiveness of the communication and/or training processes.

An effective way to use performance-related safety data is to track and post successful performance information. Charts are effective for displaying this information.

Opportunities that you can track by time frame, such as monthly, include:
- Types and number of unsafe behaviors observed by supervisors or employees;
- Number of safe behavior recognition communications by supervisors or employees;
- Number of safety discussions conducted;
- Number of reported near misses reported;
- Number of dangerous operations completed successfully, such as lockout/tagout operations;
- Number of safety suggestions and problems solved;
- Number of safe miles driven without incident.

From this information, you can identify unsafe behaviors and develop improvements to enhance the organization's safety systems and processes.

Section III - **Resource/reference**

Reference library

Our Division of Safety & Hygiene reference library in the William Green building in downtown Columbus contains literature on subjects related to occupational safety and health, rehabilitation and workers' compensation. Additional services include an online computer search system, literature searches, microfiche reader-printer, interlibrary loan, reference materials and photocopies. Our branch facility at the Ohio Center for Occupational Safety & Health in Pickerington contains hundreds of occupational safety and health videotapes. Library services are free. Call 1-800-OHIOBWC, and listen to the options.

Other Resources
Videos

Barker, Joel Arthur, Discovering the Future: The Business of Paradigms, Burnsville, MN: Charthouse Learning Corp., 1988. 38 minutes. Distributed by Charthouse Learning Corp., 1-800-328-3789.

Petersen, Dan, The Challenge of Change: Creating a New Safety Culture, Portland, OR: Safety Training Systems, 1993. 5 tapes. Available through Core Media, 1-800-537-8352.

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Books

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Byham, William C., Ph.D., and Jeff Cox, HeroZ: Empower Yourself, Your Coworkers, Your Company. New York: Harmony Books, 1994. ISBN: 0-517-59860-4. (Available on audiocassette.).

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Internet safety and health sites
State government

Ohio BWC ohiobwc.com
Ohio Environmental Protection Agency
www.epa.ohio.gov
State of Ohio www.ohio.gov

Federal government

Occupational Safety and Health Administration
www.osha.gov
National Institute for Occupational Safety and Health
www.cdc.gov/niosh/homepage.html

Other Web sites

National Safety Council www.nsc.org
American Industrial Hygiene Association www.aiha.org

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Chatterjee, Sangit, and Mustafa Yilmaz, American Management Must Change Its View Of Quality As a Necessary Evil?, Industrial Engineering, October 1991, pp 44-48.

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Section IV - 10-Step-Business Plan for Safety
Check List

We have designed the 10-Step Business Plan for Safety to help employers manage their accident-prevention and claims-management systems and processes more effectively. This should result in reduced accidents and workers' compensation losses. Participating employers will incorporate the steps into their day-to-day business strategy.

Indicate your assessment of your performance associated with each step by placing a check mark in the box following each line item.

Key: ⊚ None ⊚ Fair ⊚ Good ⊚ N/A
None = no attempt, activity or use;
Fair = some effort to use the element, but more needs to be done;
Good = a solid and credible effort at incorporating the element into organizational operations and processes. Continued efforts will bring success;
N/A   = this tactic is not applicable to this organization and will likely not be of value.

① Visible, active senior management leadership

Organizations establish safety and health as a core value of their organization.

Senior management, including the top executive on site, must act as the role model for how employees should create a safe working environment.

Active leadership includes, at a minimum, the following:

- Authorizing the necessary resources for accident prevention
  ⊚ None ⊚ Fair ⊚ Good ⊚ N/A
- Ensuring all members of management are held accountable for accident-prevention activities and for managing accident prevention
  ⊚ None ⊚ Fair ⊚ Good ⊚ N/A
- Empowering employees to take an active part in maintaining a safe workplace
  ⊚ None ⊚ Fair ⊚ Good ⊚ N/A
- Annually assessing the success of the safety process through perception surveys, personal interviews and behavior sampling strategies
  ⊚ None ⊚ Fair ⊚ Good ⊚ N/A
- Other _____
  ⊚ None ⊚ Fair ⊚ Good ⊚ N/A

② Employee involvement and recognition

Both management and employees must actively participate in the safety and health management process to maximize effectiveness. You must afford employees the opportunity to participate in the safety management and the decision-making/problem-solving processes.

Employee participation opportunities include, but are not limited to:

• Safety involvement teams	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Focus groups	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Safety committees	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Accident investigations	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Safety audits	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Safety training programs	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Other _____	⊚ None ⊚ Fair ⊚ Good ⊚ N/A

Note It will be helpful or necessary to provide employees with more education in the following areas so they can participate in meaningful discussions.

You should empower employees with these skills:

• Problem-solving skills, such as brainstorming	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Use of cause-and-effect diagrams	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Use of decision analysis techniques	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Other _____	⊚ None ⊚ Fair ⊚ Good ⊚ N/A

Note: Establish a process to identify and formally recognize employees for excellence in accident prevention.

Recognition opportunities can include:

• Consistently high contribution to safety and health	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Contribution to continuous improvement through participation in problem solving, decision making or perception surveys	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Suggestions for safety improvements; or employees who complete special safety projects	⊚ None ⊚ Fair ⊚ Good ⊚ N/A
• Other _____	⊚ None ⊚ Fair ⊚ Good ⊚ N/A

③ Medical treatment and return-to-work practices

Establish a post-injury or disability-management policy and procedure to help injured or ill employees obtain quality medical care and to return to good health.

Components of the disability management procedure should include at a minimum:	
• Establishing and communicating the procedures for obtaining medical treatment	◎ None ◎ Fair ◎ Good ◎ N/A
• Reporting accidents/illnesses immediately to the supervisor	◎ None ◎ Fair ◎ Good ◎ N/A
• Regular supervisory communications with injured employees who are off work	◎ None ◎ Fair ◎ Good ◎ N/A
• Investigation of all accidents within 24 hours to identify process improvements and corrective measures	◎ None ◎ Fair ◎ Good ◎ N/A
• You must incorporate a modified-duty program that allows employees to return to work, if possible, in a productive capacity during the recuperative period	◎ None ◎ Fair ◎ Good ◎ N/A
• Other _____	◎ None ◎ Fair ◎ Good ◎ N/A

④ Communication

Include regular communication, verbal and written, on matters affecting the safety and health of employees, and your organization's approach to managing safety and health.

Communication must include:	
• Quarterly written and/or verbal feedback to all employees on their accident-prevention performance	◎ None ◎ Fair ◎ Good ◎ N/A
• Communication processes must allow for communi-cating upward, as well as downward throughout the organization	◎ None ◎ Fair ◎ Good ◎ N/A
• Feedback should include the organization's overall safety and health performance	◎ None ◎ Fair ◎ Good ◎ N/A
• Other_____	◎ None ◎ Fair ◎ Good ◎ N/A

⑤ Timely notification of accidents/claims

You must report accidents to your MCO as required. For example, you will report all cases involving lost time of seven days or more within one week of being notified of the incident by the employee.

Duties should include:	
• Claims are reported to MCO in a timely manner	◎ None ◎ Fair ◎ Good ◎ N/A
• Verified MCO reports claim to BWC within 24 hours	◎ None ◎Fair ◎ Good ◎ N/A
• Other _____	◎ None ◎ Fair ◎ Good ◎ N/A

⑥ Safety-and-health process

You must designate an individual as the accident-prevention coordinator and give him or her responsibility and authority to act as a resource to facilitate the organization's overall safety and health approach for accident/illness prevention. A person acting in this capacity does not assume operational responsibility for safety and health, but supports line management, supervision and employees to prevent accidents.

Duties should include:	
• Helping management and employees identify accident prevention and safety training needs through the use of perception surveys, inter-views, behavior sampling or other method	◎ None ◎ Fair ◎ Good ◎ N/A
• Assisting in implementing changes or devel-oping strategies that improve safety and health	◎ None ◎ Fair ◎ Good ◎ N/A
• Identifying and communicating new safety and health requirements	◎ None ◎ Fair ◎ Good ◎ N/A
• Compiling accident- or illness-related records	◎ None ◎ Fair ◎ Good ◎ N/A
• Tracking progress on safety-related projects	◎ None ◎ Fair ◎ Good ◎ N/A
• Working with employees to optimize safe work practices	◎ None ◎ Fair ◎Good ◎ N/A
• Other _____	◎ None ◎ Fair ◎ Good ◎ N/A

Note: You may delegate these functions to more than one person. A small company owner may assume these duties or delegate them to a manager. In either case, the accident-prevention coordinator must attend at least one of our approved safety and health management course each year.

⑦ Written orientation and training

You will identify and respond to the specific training needs of your employees, including supervisors, managers or team leaders. You will develop a written safety-and-health training program that documents specific training objectives and instruction processes.

Orientation will include:				
• The company safety policy	◎ None	◎ Fair	◎ Good	◎ N/A
• Employee responsibilities	◎ None	◎ Fair	◎ Good	◎ N/A
• Other _____	◎ None	◎ Fair	◎ Good	◎ N/A

Safety training will include:				
• Specific job/task safe work practices and hazard recognition	◎ None	◎ Fair	◎ Good	◎ N/A
• At a minimum, training will cover procedures for the safe and efficient use of machinery and tools	◎ None	◎ Fair	◎ Good	◎ N/A
• Ergonomic risk factors, including the prevention of cumulative trauma disorders	◎ None	◎ Fair	◎ Good	◎ N/A
• If appropriate, training also should focus on chemical hazards and how to prevent contact or exposure	◎ None	◎ Fair	◎ Good	◎ N/A
• Procedures for lockout/tagout, hot work permit and confined space entry	◎ None	◎ Fair	◎ Good	◎ N/A
• Other _____	◎ None	◎ Fair	◎ Good	◎ N/A

Note: Document all training to include the date, topics covered, instructor's name and the names of employees attending the training session. Have each employee in attendance sign the documentation form on the day of completion.

⑧ Written and communicated safe work

Written safe work practices are important for a clear understanding of job requirements and responsibilities. Identify, document and make available both general and job-specific safe work practices. Provide employees with a copy of the general safe work practices. Have all employees sign a statement indicating they have read, understand and will follow the safe work practices.

Examples of general safe work practices expected of most employees include, but are not limited to:				
• Contributing to good housekeeping	◎ None	◎ Fair	◎ Good	◎ N/A
• Using personal protective equipment	◎ None	◎ Fair	◎ Good	◎ N/A
• First-aid procedures	◎ None	◎ Fair	◎ Good	◎ N/A
• Ergonomic principles	◎ None	◎ Fair	◎ Good	◎ N/A
• Respiratory protection	◎ None	◎ Fair	◎ Good	◎ N/A
• Confined space entry	◎ None	◎ Fair	◎ Good	◎ N/A
• Other _____	◎ None	◎ Fair	◎ Good	◎ N/A

Note: Job-specific safe work practices apply to operations and tasks that involve recognized hazards and risks associated with specific job functions and procedures. Post or make readily available job-specific safe work practices.

⑨ Written safety and health policy

Give all new hires a copy of the company's safety policy signed by your top executive. Communicate the safety policy to all employees and review it with them on an annual basis.

It must include:

- The chief executive officer's philosophy on safety and well being of employees with his or her commitment to quality
  ◯ None ◯ Fair ◯ Good ◯ N/A

⑩ Recordkeeping and data

Organizations must compile occupational accident and illness-related data to:

• Identify safety process problems	◯ None	◯ Fair	◯ Good	◯ N/A
• Help manage the compensation process	◯ None	◯ Fair	◯ Good	◯ N/A
• Provide information necessary for developing solutions to problems	◯ None	◯ Fair	◯ Good	◯ N/A

Note: Timely feedback on accidents, causes and trends for managers, supervisors and employees is important for identifying system improvements and for tracking progress.

Claims and cost information, when linked with specific operating units, helps achieve maximum profitability.

Is the company demonstrating on a regular basis for its employees the following types of information?

• The linkage between accident prevention and profitability	◯ None	◯ Fair	◯ Good	◯ N/A
• Effective operations	◯ None	◯ Fair	◯ Good	◯ N/A
• Specific costs associated with safety and health problems and accidents	◯ None	◯ Fair	◯ Good	◯ N/A

Section IV - 10-Step-Business Plan for Safety
Check List

Summary of key area evaluation

Visible, active senior management leadership   1

- Assessment: _____
  _____
- Recommendations:_____
  _____

Employee involvement and recognition   2

- Assessment: _____
  _____
- Recommendations:_____
  _____

Medical treatment and return to work   3

- Assessment: _____
  _____
- Recommendations: _____
  _____

Communication   4

- Assessment: _____
  _____
- Recommendations: _____
  _____

Timely notification of claims   5

- Assessment: _____
  _____
- Recommendations: _____
  _____

Safety and health process coordination and employer education   6

- Assessment: _____
  _____
- Recommendations: _____

Orientation and training   7

- Assessment: _____
  _____
- Recommendations: _____
  _____

Written and communicated safe work practices   8

- Assessment: _____
  _____
- Recommendations: _____
  _____

Written safety and health policy   9

- Assessment: _____
  _____
- Recommendations: _____

Recordkeeping and data analysis   10

- Assessment: _____
  _____
- Recommendations: _____

Use this area to summarize your individual 10-Step Business Plan for Safety evaluation.

Integrating Safety into TQM
by Dan Petersen
consultant in safety management and organizational behavior

Safety and total quality management (TQM) fit hand-in-hand — unless safety practitioners choose to block the union because they perceive it to be different and threatening. Some within the profession contend that the goal of a safety practitioner is to work himself/herself out of a job. Integrating safety into TQM may be the best way to do just that.

The real question: Do safety practitioners want this marriage? Consider these potential consequences:
- Replacement of job safety analyses (JSAs) with flow diagrams, which will diagnose system weaknesses. These weaknesses should be diagnosed by those who know—the employees;
- Replacement of accident investigation procedures with fishbone diagrams to search for multiple causes;
- Use of behavioral sampling and perception surveys to measure effectiveness and identify weaknesses;
- Management acceptance and understanding of the safety management process;
- A new organizational culture, with safety perceived as a high corporate value;
- Accountability.

TQM and traditional safety
In most companies, quality of performance means initial quality of product and increased productivity. Some companies include quality safety performance at a much later point, often as an afterthought.

Employee involvement is central to TQM philosophy, which also includes these concepts:
- Building a new organizational culture that embraces safety;
- Using new tools to solve problems;
- Continuous improvement of the process;
- Using upstream measures to monitor progress.

Perhaps the best description of TQM is captured in W. Edwards Deming's 14 "Obligations of Management." Although the total quality approach differs greatly from traditional safety concepts, the TQM philosophy works well when applied to safety.

If Deming's "Obligations of Management" were rewritten in safety jargon, they might read as follows:

1) Concentrate on the long-range goal of developing a world-class system, not on short-term annual accident goals;
2) Discard the philosophy of accepting accidents—they are not acceptable;
3) Use statistical techniques to identify the two sources of accidents—the system and human error;
4) Institute more thorough job skills training;
5) Eliminate dependence on accident investigation. Instead, use proactive approaches such as behavioral sampling, fishbone diagrams or flow charts to reveal system flaws and achieve continuous system improvement;
6) Provide supervisors (and employees) with knowledge of statistical methods such as sampling and control charts and ensure that these tools are used to identify areas needing additional study;
7) Reduce fear throughout the organization by encouraging all employees to report defects and help find solutions;
8) Reduce accidents by designing safety into t he process;
9) Eliminate the use of slogans, incentives, posters and gimmicks to encourage safety;
10) Examine work standards to remove accident traps.

Other aspects of TQM are valuable as well. In fact, measures for the following are necessary in safety:

- Ask employees to define and solve company problems and identify system weaknesses;
- Provide employees with simple tools to solve problems. These include Pareto charts to determine problems; fishbone diagrams to help brainstorm problem causes; flow charts to observe the system; and scatter diagrams to determine correlations;
- Replace accident-based statistics with other upstream measures such as behavioral sampling;
- Replace accident-based statistics with alternative downstream measures including employee perception surveys and employee interviews.

The 10 safety obligations represent a marked departure from traditional safety beliefs. Under these new corporate obligations:

- Progress is not measured by accident rates;
- Safety becomes a system, rather than a program;
- Statistical techniques drive continuous improvement efforts;
- Accident investigations are either reformed or eliminated;
- Safety sampling and statistical process control tools are used;
- Blame for "unsafe acts" is completely eliminated;
- Focus is on improving the system;
- "Whistle blowers" are encouraged and supported;
- Employee involvement in problem-solving and decision-making is formalized via corporate procedures;
- Ergonomic well-being is designed into the workplace;
- Safety slogans and gimmicks are eliminated;
- Emphasis is placed on removing system traps that cause human error.

Moving beyond the traditional

The move toward TQM in safety means refuting many traditional concepts such as:
1) Irresponsible acts and conditions cause accidents;
2) The three Es of safety—engineering, education, enforcement—are essential to safety programs;
3) Low compliance is sufficient;
4) The executive role is only to sign policy;
5) Management creates safety rules; employees follow them.

These beliefs should be replaced with the following axioms:
1) Accidents are caused by a defective management system and a weak safety culture;
2) Many methods can be used to shape behavior, not merely the three Es;
3) No magic pill can be prescribed. Practitioners must determine which approaches will work best, depending on situational demands;
4) Low compliance has limited influence on safety results;
5) Executives must provide safety leadership;
6) Decisions made at the bottom—by affected employees—are most effective.

Why is change necessary?

TQM can seem complicated (although it is not). Since many traditional beliefs must be changed to achieve success, safety practitioners may ask: Why bother? Some answers:

- Traditional safety programs no longer work (if they ever did). Most are not based on fact (no scientific research), and they tend to conflict with both management and behavioral research;
- Accident records continue to deteriorate, as companies focus on complying with regulations based on traditional safety beliefs;
- The safety system must be built into an organization's management structure. Historically, safety has been kept separate from regular management. As management has experienced numerous transitions, safety has been suspended in the classical model: management decides, employees follow orders. As a result, safety has become a foreign subject to many managers and executives;
- As management familiarity with safety has decreased, the external environmental has increased management's vulnerability to such areas as legislation, criminal liability and higher fines;
- More "injuries" (such as cumulative trauma disorders and stress) are compensable today than ever before. Practitioners cannot address these problems via machine guarding technology;
- The nation's workers' compensation (WC) system is not only in trouble, it is ill — perhaps terminally. WC carriers are withdrawing from some markets, a trend expected to continue.

Although the future is largely unknown, some suggest that:
1) Accident costs will continue to increase each year;
2) Growing numbers of illnesses will become compensable;
3) State laws may be replaced by federal laws, which will likely be more costly;

4) Occupational injuries may eventually be paid under a national health care plan, funded completely by taxpayers. Such a system will remove management's incentive for safety.

The bottom line: If safety is not incorporated into the regular management system now, the window of opportunity may permanently close. Is this "overboard thinking"? Practitioners must decide. Incorporating safety into the TQM process seems the best route to achieve real success—and the sooner the better.

What steps are involved?

Let's examine the basic TQM concepts outlined earlier:
- Employee Involvement. Decide what employee involvement means. Does it mean: Asking for input before management decisions are finalized? Sharing the decision-making process? Allowing employees to make decisions?
  Once the level of involvement is defined, take the short-term steps needed to move in that direction. These include confirming that management is credible and has done everything possible to ensure safety.
- A new culture. Safety must be perceived as a key value. Again, ensure that management is credible. Determine the status of the company's safety culture and take steps to establish a new culture.
- New tools. Train employees to use problem-solving tools. Create a structure in which they can effectively use these tools.
- Continuous improvement and use of the best upstream and downstream measures. These concepts require that the influence of accident-based rates be completely removed from upstream measures (and likely from downstream measures). Rates must be replaced by behavioral sampling, perception surveys and other tools that reveal a company's statistical reliability.

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During his career, Petersen has held numerous safety positions, including director of the graduate program in safety management at the University of Arizona, associate professor at Colorado State University and professor at Arizona State University. A widely published author, he is a professional member of ASSE's Arizona chapter.

14 Obligations of Management
by W. Edwards Deming
1) Innovate and allocate resources to fulfill the long-range needs of the company and customer, rather than short-term profitability.

2) Discard the old philosophy of accepting defective products.

3) Eliminate dependence on mass inspection for quality control. Instead, depend on process control through statistical techniques.

4) Reduce the number of multiple source suppliers. Price has no meaning without an integral consideration for quality. Encourage suppliers to use statistical process control.

5) Use statistical techniques to identify the two sources of waste—system (85 percent) and local faults (15 percent); strive to constantly reduce this waste.

6) Institute more, thorough job-related training.

7) Provide supervision with knowledge of statistical methods. Encourage the use of these methods to identify which defects should be investigated for solutions.

8) Reduce fear throughout the organization by encouraging open, two-way, non-punitive communication. There is an appalling economic loss resulting from fear to ask questions or report trouble.

9) Help reduce waste by encouraging design, research and sales personnel to learn more about the problems of production.

10) Eliminate the use of goals and slogans to encourage productivity, unless training and management support is also provided.

11) Closely examine the impact of work standards. Do they consider quality or help anyone do a better job? They often act as an impediment to productivity improvement.

12) Institute rudimentary statistical training on a broad scale.

13) Institute a vigorous program for retraining people in new skills, to keep up with changes in materials, methods, product design and machinery.

14) Make maximum use of statistical knowledge and talent within your company.