



Safety System Assessment Factors

"Safety is a journey. It's always something we're trying to attain. And it only lasts a moment because people change, processes change and the environment changes.

So achieving safety in one particular day doesn't mean you have a safe day the next day.

Being vigilant, always reviewing your programs, always looking for quality improvements – that's attainable. But safety as a goal is difficult."

Dr. John Howard
Director of the
National Institute for
Occupational Safety
and Health

The *Journey to Safety Excellence*[®] Safety System Assessment provides a mechanism to self-assess your location's safety management system. A comprehensive safety management system should give consideration to administrative and management, operational and technical, and cultural and behavioral aspects of safety and health. Below are the elements for establishing and maintaining a successful safety management system that are measured in the Safety System Assessment as well as definitions for each.

Management Leadership and Commitment

- The National Safety Council Safety Management System calls for a personal commitment to safety—not only commitment to safety as a value, but commitment to the management factors that integrate that value into the culture. Executive management must be the first to accept the merits of improving the safety process—merits that include reduced injuries, reduced costs associated with injury, improved public image, increased morale, production, quality, and, ultimately, profitability.
- Acceptance of these merits is the personal factor in management's commitment to safety. It is the factor that determines:
 - How willingly management invests resources in the improvement of the safety process.
 - The soundness of management's accountability systems.
 - How effectively leadership will lead.

Motivation, Behavior, and Attitudes

Motivation gives workers the awareness, interest and willingness to increase safety efforts and support organizational goals and objectives.

- Motivation, which commonly aims at changing behavior and attitudes, is generally defined by three factors: 1) direction of behavior, 2) intensity of action, and 3) persistence of effort.
- Two motivational approaches to improve safety and health performance are:
 - Organization behavior management (OBM) model—use of reinforcement and feedback to modify behavior.
 - Total quality management (TQM) model—attitude adjustment methods used to achieve quality improvement goals in industry.
- Visible management leadership is important in changing worker attitudes and behaviors.

Workforce Involvement

Workforce involvement in all phases of a safety management system benefits workers and management through performance improvements and increased acceptance and support of policies.

- Management can facilitate a cooperative effort to improve a safety system through worker involvement in proactive safety activities and participation in the decision-making process.
- Management commitment to meaningful worker involvement can be demonstrated by establishing a policy for ongoing and meaningful worker involvement in proactive activities that focus efforts on recognition, evaluation and control, or elimination of workplace hazards.

Operational Processes and Procedures

Too often regulatory compliance is the only driving force behind many safety and health programs. But, a successful safety management system must focus beyond mere compliance and concentrate on managing risk to worker's safety and health along with regulatory compliance issues. In order to accomplish this:

- Regulatory compliance policies should be established for required occupational safety programs based on the needs of the organization.
- Management must determine the scope and nature of the organization's occupational health program and allocate resources to provide appropriate services. Management should develop program goals and establish functions, programs, procedures, and activities to meet the organization's occupational health goals.
- Successful safety and health programs must effectively manage and control external exposures. External exposures include any influences on risk that arise outside the boundaries of company property or are caused by a third party.

System Management and Communication

- A high level of communication facilitates the administration of an effective safety management system. It keeps workers informed about policies, procedures, roles, responsibilities, goals and program results. It also fosters positive working relationships between the organization and the outside community.
- To be complete, communication must flow in two directions—from management to workers and from workers back to management. Additionally, accurate recordkeeping and documentation is essential when generating reliable information for analysis, decision-making and measuring continuous improvement.

Training and Orientation

Safety training should be planned and implemented to assure a systematic and prescribed process (needs analysis, course design and development, and an evaluation strategy) is applied in a consistent manner. It should incorporate:

- Specific criteria that includes:
 - Learning objectives that state desired knowledge, skill or ability to be gained by the participant. Objectives should be measurable/observable.
 - Delivery methods (lecture, hands-on training, demonstration, computer-based training, etc.) that consider the background and experience of participants and learning objectives.

- Trainers who have technical knowledge, skills or abilities in the subjects they teach, as well as being competent in adult learning instructional techniques and methods.
- Trainers required to maintain professional competency by participating in continuing education or professional development.
- Training delivery that incorporates adult learning principles appropriate for the target audience and learning objectives.
- Written documentation of evaluation methods used to verify the training has achieved learning objectives.
- Training records in accordance with the established record keeping system.
- An annual training plan developed and implemented for each operating unit.
- Periodic management training should be scheduled and should focus on management's roles and responsibilities and what is necessary for management to lead the ongoing safety improvement process.
- A formal safety orientation program that includes contractors and temporary workers should be provided prior to job assignment. The program should provide the attendee with sufficient skills and knowledge to enable them to perform their job safely. The program should include testing for comprehension and include periodic follow-up by the immediate supervisor.

Hazard Identification and Risk Reduction

Effective hazard recognition, evaluation and control are central to a successful safety management system. Hazard control is accomplished through a continuous process of identification, planning, implementation and re-evaluation. It starts with the commitment and involvement of senior management through:

- Establishing a policy for ongoing recognition, evaluation and control or elimination of workplace hazards in order to maintain an acceptable level of risk in the workplace.
- Developing a hazard control inventory.
- Establishing a hazard analysis procedure to identify existing and potential hazards, as well as conditions and operations in which changes might create hazards. Several tools may be used to do this based on organizational needs, including job safety analysis, safety inspections, risk assessments, industrial hygiene exposure assessments, incident investigations, process hazard analysis and system safety reviews.
- Initiating hazard evaluation in which a hazard and the potential it has to result in an incident is analyzed. Once the hazard is evaluated, the best method of control (based on the risk assessment) can be selected and implemented.
- Designing and implementing control measures to bring risk to an acceptable level when worker exposure to health or physical hazards is found to pose an unacceptable risk. The best approach to take to accomplish this is to eliminate hazards at the design stage. If this is not feasible, then the following hierarchy of control measures should be applied:
 - Engineering controls
 - Administrative controls
 - Personal protective equipment

Assessment, Audits, and Performance Measures

- An assessment process can provide management with constant and meaningful data on the effectiveness of the safety management system. Assessing the effectiveness of the safety management system is crucial to facilitating continuous improvement and reducing injuries and illness. A safety management assessment should objectively evaluate compliance with policies and procedures, quality and effectiveness of implementation, and any gaps in compliance or policy. It should also propose action plans for improvement.
- To be effective, all assessment findings must be reported, documented and acted upon by management in a meaningful and timely manner. Assessments should be conducted at all levels of the organization. Team members should include individuals with assessment experience and necessary technical and management competencies.