

Management-Based Safety: Leading Your Organization To New Heights

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Introduction

Organizations face numerous barriers preventing them from attaining safety performance excellence. One of the barriers is the fact that senior managers aren't demanding excellence and therefore are not committed to or involved in the safety management process. As a result of this, the organizations managers and supervisors don't accept responsibility for worker and workplace safety and are not held accountable for performance. One of the largest barriers is that rules aren't being rigidly or consistently enforced. Those same organizations do not communicate consequences for violating rules and procedures. Consequently, employees challenge compliance regularly. In most organizations, managers, supervisors, and employees are not involved in constant hazard recognition and remediation. Employee risk-taking is condoned/encouraged and employees aren't held personally responsible for their own performance. Another barrier is that the root causes of hazards and accidents are rarely identified and addressed. Finally, goals, objectives, and accountability measures are ineffective or non-existent, and poor organizational safety performance is tolerated. In these organizations, work output, quality and cost issues strongly overshadow safety performance. However, the biggest hurdle for most organizations is finding a way to fix all of those things that is successful, sustainable, and achievable.

Many organizations know what they must do to improve their safety culture, but have difficulty making it happen. When attempting to improve their safety culture, most organizations get stuck somewhere between theory and application.

For management and employees at all levels to engage in any safety improvement process, it must be simple and cannot be overly time-consuming. Time is a most valuable commodity in any organization. *Management-Based Safety* is a simple process designed to help organizations get beyond theory and into practical application of safety management system concepts. The Management-Based Safety is a comprehensive streamlined safety management system designed to support: OSHA's Voluntary Protection Program Criteria, ISO 18001 certification and ANSI Z-10 Safety and Health Management System compliance.

In 2005, U.S. scheduled air carriers had 10.9 million departures. They flew more than 18.7 million flight hours. During this time they experienced a remarkable safety record of 32 total accidents with 3 related fatalities. That translated to 0.171 accidents per 100,000 flight hours and

0.0016 fatal accidents per 100,000 flight hours. Conversely, in 2004, U.S workplaces experienced 4.2 million OSHA Recordable Injury & Illness Cases. U.S. workers had 1.2 million Lost Workday Cases and suffered 5,702 traumatic workplace fatalities. Tragically, four of every 100,000 workers died on the job in 2005. 4.6 of every 100 workers suffered OSHA recordable injuries and 2.4 employee injuries per 100 were classified as lost time. Furthermore, it is estimated that tens of thousands of other workplace deaths can be attributed to chronic occupational diseases each year. Although traditional workplaces have improved their safety performance over the years, they are still considerably worse than the in-flight safety performance logged by U.S. air carriers.

Historical data suggests that pilot or other human error causes roughly 60% of airplane crashes. Another 20% of crashes result from mechanical problems. In traditional workplaces, it is widely accepted by most that the vast majority of accidents are the result of unsafe worker actions. A minority result from unsafe workplace conditions in today's work environments. Both of these factors combined cause greater than 90% of all accidents. With similar causes of accidents in both environments, how is it that the airline industry's safety performance can significantly outpace that of traditional workplaces?

To understand why airplanes rarely crash, we need to consider the following: First, pilots are highly trained before there are allowed to fly and then continually retrained on hazard recognition and avoidance. Second, maintenance of airplanes is highly regulated and preventative in nature. Third, operating systems on planes are redundant. Forth, pilots audit their "workplace" before; during and after they fly and their conformance to standards are closely monitored. Finally, pilots know with great certainty that they will pay the ultimate consequence for taking shortcuts.

On the other hand, workers have accidents in typical workplaces more frequently for the following reasons. Employees aren't highly trained to spot and deal with workplace hazards. In most workplaces, safety training at best consists of covering a handful of regulatory required subjects. Training is conducted by some employers for new employees and annually for existing employees. Training and retraining in most cases does not focus on task specific hazards encountered by employees daily which are causing the bulk of the injuries. Physical facility maintenance in most workplaces is not preventative and redundant safety protections are not built into most typical work processes...leading to accidents. Employees are placed at-risk because they usually don't audit their personal work environment before, during, or after their work is performed. Furthermore, their safety performance is not closely monitored by management unlike how production output and quality are monitored. Workers also sometimes have accidents because risk taking is condoned and in many cases rewarded by management through the use of production output incentives. Workers take risks because rules and procedures lack clarity and strong management enforcement is non-existent. In many cases, workers do not see substantial vested personal interest in working in a safe manner due mainly to the fact that production output or other risk drivers are overshadowing the importance of safety. Most employees don't fully appreciate what the consequences of their actions or lack thereof will be, and are often placed in a position of trading safety for profits or a paycheck.

The Management-Based Safety Process

The airline industry has learned to manage safety performance outcomes effectively. Air travel in the U.S. and abroad with U.S. air carriers is the safest in the world. The *Management-Based*

Safety process integrates many of the same processes used in the airline industry to help traditional industries achieve safety performance improvements leading to excellence.

Through education and personal experience, this author has learned that several critical elements separate those organizations that perform well in safety from those that do not. These critical elements include: having demonstrated senior management commitment and line management ownership for safety; developing and demonstrating a safety philosophy; utilizing an organization to effectively manage the safety process; assuring safety support personnel understand and execute their proper roles to support line management; establishing and enforcing standards of performance; establishing achievable performance goals and motivating both management and employees towards achieving those goals; developing and fostering an organizational attitude of unconditional regulatory compliance; sufficiently enhancing communications to increase awareness regarding the importance of safety within the organizational hierarchy; and using a focused and systematic approach to dealing with hazard frequency, severity and individual accident repeaters.

The *Management-Based Safety* process translates those critical elements into management and employee actions through the use of various tools and activities. Many interested in improving organizational safety and health performance understand these elements but have faced difficulty in trying to institutionalize them. Consequently, many organizations find that achieving consistent safety and health performance excellence is both elusive and difficult. The *Management-Based Safety* process was designed specifically to help safety and health practitioners overcome the frustrating internal organizational resistance to improve safety performance. The process utilizes various management tools and training methods to help organizations achieve success simply, quickly, and consistently.

When all is said and done, this author feels that effective safety management really boils down to three things: *Management clearly communicating to employees what is expected; employees doing what is expected; and management assuring that employees do what is expected.* For the most part, managing safety performance in organizations is really no different than managing any other business function. As a result, The *Management-Based Safety* process is founded on the following principles:

- *Senior Management controls the organization's destiny regarding safety performance.*
- *Management at all levels needs to continually communicate its safety performance expectations.*
- *Improper decisions resulting in unsafe acts and conditions lead to the majority of all incidents.*
- *Most incidents and hazards within the organization have occurred previously with or without serious consequences*
- *Management needs to be physically involved in performing risk reduction activities and to measure safety performance outcomes just as they would other business functions.*
- *Management needs to be held financially accountable for safety performance.*

- *Employees will follow management's lead and directives if they are clearly communicated and consequences for not following them are understood and strongly enforced.*
- *Employees are in the best position to seek out and control hazardous work area exposures.*
- *Employees need to be held personally responsible for their own actions or lack thereof in controlling risk.*

So, why is *Management-Based Safety* different than other safety management approaches? First, it takes a large fragmented function and breaks it down into manageable components. Second, it promotes total management control of safety outcomes. It places management in a position to perform targeted activities to improve safety performance. Third, the process engages employees in continually assessing and controlling their own safe work environment. *Management-Based Safety* however is not a *flash in the pan- program of the month quick fix* approach. It is not a waste of valuable management time or a traditional safety management approach producing limited success. But, most important, it is not for organizations that aren't *totally committed* to preventing employees from getting hurt, controlling incident costs, and maximizing regulatory compliance. The process requires change, commitment, and involvement on the part of management and employees.

The *Management-Based Safety* process is simple and cost effective. If implemented correctly, the process will significantly and consistently improve organizational safety performance. It is designed for any type or size of organization. As previously discussed, the *Management-Based Safety* process uses various simple but efficient tools to involve management and employees in activities designed to produce safety and health performance improvements.

Management-Based Safety tools and activities form the building blocks of the *Management-Based Safety* process. There are four types of tools used in this process. They include Manager, Supervisor, Employee and Process Management tools:

Manager Tools

Safety Leadership Teams are chaired by senior leaders at a corporate, site, or department level and attended by direct reports, select non-management employees, and pertinent staff members. These Safety Leadership Teams transcend the organization and are established at various organizational levels in an effort to produce management ownership and involvement in safety. The Safety Leadership team(s) meets (monthly or quarterly) for one hour meetings to monitor and steer the safety management process. Meetings have defined agendas and serve as a reporting forum to discuss YTD safety performance, management safety activity completion, significant injury and compliance issues, employee activity involvement, significant unresolved safety issues, follow-up actions regarding past serious incidents, etc. These teams also deal with the proper allocation of resources for improving safety performance.

The ***Safety Stand-down*** is another management tool used as part of the *Management-Based Safety* process. These are regular large employee group safety meetings conducted by management. These meetings follow a formal agenda. They are held primarily to review safety performance expectations and results, and to review subject specific incident prevention and regulatory information. They are used secondarily as a forum to solicit employee safety concerns and also used at times by Senior Management after serious events occur to refocus employees.

The **Safety Stand-up** is a tool used by management and is similar to Safety stand-downs. These are meetings held by management to congratulate employees on pre-established internal and external performance milestones achieved, to recognize safety contributors, to recognize individual and group performance accomplishments, and to present safety recognition awards to deserving employees and groups.

Another *Management-Based Safety* tool is the **Root Cause Evaluation**. *Root Cause Evaluations* are meetings held by management *after* an accident investigation is completed. The purpose is to discuss the event with all involved, review the pertinent facts, assure the true root causes of the event have been identified, and to critique the preventive measures recommended to assure they will eliminate a future reoccurrence of the event.

Safety Tours are another management tool. These tours are conducted on a scheduled basis of major work locations or jobsites. Their purpose is to demonstrate visible management involvement in assessing worker safety and their workplace. The tours are done mainly to observe employee personal protective equipment usage and work area housekeeping. Both are excellent measures of supervisory and employee safety attitudes and concern for working safely and maintaining a safe work environment. They are highly symbolic in nature but serve to send a strong message to supervisors and employees alike. *Safety Tours* are also used as a way for management to interface with employees directly on safety issues.

Finally, **Safety Reviews** are used by management as part of the Management-Based Safety Process. These reviews are incorporated into the organizations existing performance review process. These review meetings are used to: establish future leading and trailing performance measures identify and discuss areas of safety management focus and discuss annual performance progress against pre-established personal safety management action plans.

Supervisor Tools

A primary tool used by supervisors is the **Safety Walk-down**. These *Safety Walk-downs* are frequent audits conducted to detect positive behaviors, safe work area conditions, identify deviations from established procedures, to verify behavioral and physical hazard corrections, and to provide immediate positive employee feedback. *Safety Walk-downs* are scheduled, documented, and used as a forum for supervisors to discuss personal safety issues with employees.

Safety Talks are a tool used by supervisors and are held on a frequent basis. These are quick 15 minute work group meetings held to cover various topics with employees. However, their primary purpose is to restate safety performance expectations, to keep employees abreast of performance trends (both leading and trailing indicators), and as a regular forum to discuss task specific or work area hazards. These meetings are also used by supervisors to solicit employee safety concerns.

Safety Fix Meetings are another simple supervisory tool part of the *Management-Based Safety* process. They are 15 minute meetings used by supervisors to solicit employee ideas and discussion for the resolution of safety issues. They are designed to quickly deal with safety issues within the supervisors span of authority. They are also an excellent way to involve employees in

deciding how safety issues can be addressed, promoting immediate ownership and acceptance of solutions.

The ***Incident Analyzer*** tool is a double check process used after an incident investigation has been completed. This tool utilizes various questions to assist supervisors with making sure they have properly identified and corrected root causes.

Safety Sit-downs are another effective *Management-Based Safety* tool which are focused primarily on personal employee performance. *Safety Sit-downs* are one on one supervisor–employee meetings. They are held to provide *immediate feedback and correction* to employees who demonstrate at risk behaviors noted during *Safety Walk-downs* or identified during incident investigations. They are also used to provide *annual feedback* (written and verbal) for all employees. At annual meetings, supervisors review individual *Safety Walk-down* results *and personal* safety performance and develop individual written improvement plans for at risk employees if necessary.

Employee Tools

Employees also play a substantial role in the *Management-Based Safety* process. Employees are involved on a daily basis by reviewing and completing a ***Safety √ List*** prior to commencing work. This process is similar to a pilot completing a preflight checklist and physically inspecting the airplane before takeoff. The completion of *Safety √ Lists* are designed to take no more than 5 minutes each day. *Safety √ Lists* are built for each major job task. They are constructed from past, near miss, injury and property damage experience. In addition task specific safety rule and procedure information is integrated into the completed lists. Employees use the *Safety √ Lists* daily to raise and/or maintain constant awareness of pertinent safety issues. They are also used to formally communicate to supervision regarding hazards within their job task that they need assistance to remedy. *Safety √ Lists* are at the heart of the *Management-Based Safety* process. They deal directly with promoting safe and desirable behavior among every employee each day in an effort to minimize unsafe acts and unsafe conditions that are specific to the task they are being asked to perform.

The daily use of the *Safety √ Lists* by employees focus them on hazard awareness and avoidance, and serve to satisfy regulatory requirements. For example, some of OSHA's standards require the employer to instruct each employee on the recognition and avoidance of unsafe conditions, and the regulations applicable to their work environment to control or eliminate any hazards or other exposure to illness or injury. Some regulations require that existing conditions be evaluated prior to an employee's exposure so that hazards can be minimized. Other regulations require the employer to initiate and maintain frequent and regular inspections of the job site, materials, and equipment. *Safety √ Lists* are a method used to achieve compliance with these standards and regulations.

Another employee tool is ***Safety Coaching***. This tool facilitates the process of conducting peer to peer employee safety observations. These observations are similar to *Safety Walk-downs* and *Safety Tours* performed by management and supervisors, however, they are less formal and are not monitored by management.

Process Management Tools

Various other tools are used to manage the MBS process. The ***Safety Flight Plan*** is a written plan developed and monitored by the *Safety Leadership Team*. This plan establishes the organization's long range destination, sets annual performance goals, identifies major area of focus, establishes performance milestones and sets safety management activity frequencies for management, supervisors and employees.

The *Management-Based Safety* process places a high level of emphasis on management and supervisory involvement. The process physically involves management including Senior Managers, Department Heads, Managers, Supervisors and Team Leaders. This is facilitated and monitored via the development of a ***Management Safe-T-Map***. The *Safe-T-Map* is a focused written action plan which specifically defines leading indicator activities designed to significantly improve safety performance. They include such actions as establishing and frequently communicating desired safety performance goals and expectations to their employees, frequently and deliberately auditing for acceptable safety performance via physical worker and work area observations and through leading incident investigations, providing formal and informal feedback to employees to acknowledge acceptable safety performance or to immediately correct undesirable safety performance, and assuring employee ownership and control of their personal safety performance each work day.

The ***Safety Activity Monitor (SAM)*** tool is a computer database management system that is used to track management and employee safety activities completed compared to established goal targets. Management reports are generated from the ***SAM*** to assure both management and employees are on track to meet established activity performance criteria. This system also integrates various trailing performance indicators to monitor organizational performance such as OSHA rates, Workers' Compensation claims and costs, etc.

The ***Safety Deviator Guideline*** is another tool used by supervisors as part of the *Management Based Safety* process. The *Safety Deviator Guideline* spells out specific consequences for violating rules and procedures. This guideline is used by supervisors for dealing consistently with individuals within the organization who continually challenge safety rules and procedures or exhibit at risk behaviors.

Another process management tool, ***The Safety Tracker*** is a computerized tracking system used to: document hazards, track completion status, and provide real-time status of hazard resolution to employees. Its main purpose is however to prevent unresolved safety issues from falling through the cracks which occurs typically in most organizations. ***The Safety Tracker*** tracks safety issues identified in *Safety Leadership Team meetings*, discovered by management while conducting *Safety Tours*, noted on employee completed *Safety √ List's*, noted by supervisors during *Safety Walk-downs*, brought to managements attention at *Safety Stand-down meetings*, identified in *Safety-fix and Safety Talk meetings*, or revealed during *Root Cause evaluations*. This tool is used mainly to track unresolved hazards but can also be used to track issues such regulatory audit findings, regulatory training completion, recordkeeping etc.

On the surface the *Management Based Safety* process may appear time consuming. But, employees will spend no more than five minutes each day and management personnel will spend only a small fraction of the time they dedicate to managing other issues such as production output, quality, cost management, etc. The total time required to complete all activities by any

level of management to perfection is less than 3% of the time spent on all other non-safety activities. This is a small investment for substantial returns.

A five-step approach is used to implement *Management-Based Safety* process within organizations. These steps include first completing a current state organizational safety management assessment. The second step involves aligning senior management so that they fully understand the process and totally support its implementation. The next step involves training management and supervisors on the process and developing task specific *Safety List's*. The fourth step involves orienting employees to the process and discussing their specific roles. The final step involves data analysis for the purpose of reassessing the implementation of the process within the organization and realigning as necessary.

Conclusion

The *Management-Based Safety* process aims to produce both tangible and intangible benefits for organizations including:

- Significantly reduced injury and non-injury incidents.
- Significantly reduced direct and indirect incident and injury costs due to reduced incident frequency.
- Significantly increased employee compliance with rules and procedures.
- Improved management/labor relations.
- Improved employee morale.
- Improved organizational productivity.
- Improved regulatory compliance.
- Sarbanes-Oxley senior management protections.
- Total employee control of the hazards and safeguards within their assigned tasks.
- Total management control of safety performance.

In conclusion, for safety cultures to change and for performance excellence to be realized, senior leaders need to initiate the change. Managers and supervisors need to accept and nurture the change. Employees need to have a vested interest and participate in the safety improvement process. The *Management-Based Safety* process can and will lead to the achievement of safety performance excellence in any organization.

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