
Enlisting Participation in an Injury Prevention and Management Program

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Industrial-injury prevention and management has been a topic of great concern for a number of years. Over the past decade the methods for addressing this costly problem have become quite sophisticated. Approaches range from ergonomic evaluation and redesign of the work place,^{1,2} educational programs for employees and supervisors,³ fitness programs both on-site and off-site,^{4,5} incentive programs, and evaluation of the psychosocial aspects of injury.⁶⁻⁸

A review of the literature presents a variety of injury prevention and management programs that lay claim to at least a moderate degree of success.⁹ This type of data must be interpreted carefully, as there are numerous variables that can account for a reduction in injury rate and severity of injury. Despite the difficulty in determining the specific effects of these programs, there does seem to be substantial evidence that a significant reduction in injuries and costs can be achieved. When evaluating the philosophy upon which most successful programs are based, a general pattern emerges:

1. There is a genuine commitment from management to keep its employees safe and productive.
2. Ongoing safety-related activities in the company keep the program alive.
3. Employees are willing to participate in and contribute to the program.

The purpose of this article is to address the role of management, employee, and supervisory participation in a comprehensive injury-prevention program. The information presented is based on a review of the literature, discussions with peers, and personal experience with industry over the past five years. It has been this author's experience that without an effort by all parties to play an active role in this process, the chances for success and the degree of success will be drastically reduced.

All three factors just mentioned are critical components of a successful program. It should not, however, be taken for granted that this philosophy exists in most industries today. In most cases the company will have a limited safety budget and will also have limited insight into what really needs to be done to address its problems. As consultants, therapists must determine which conditions within the industry may have a bearing on the effectiveness of an injury-prevention program. Questions that should be asked may include the following:

- Is there an effective medical-management system in place?
- Is there an effective return-to-work policy in place?
- Is there an official employee-education program in place that addresses the prevention of musculoskeletal problems?
- Is there an official method for reporting equipment problems so that they can be addressed in a timely manner?
- Is there an official method of communication within the facility?

- Is there a physician affiliated with the company who understands all the job demands?
- Is the relationship between management and supervisors often strained?
- Is the relationship between supervisors and employees problematic?
- Is "job satisfaction" part of the employees' vocabulary?

The extent to which any combination of these conditions exists within a company makes the job of enlisting employee participation challenging.

IDENTIFYING THE PROBLEM

The need to address musculoskeletal injuries in the workplace is becoming more and more evident. The total costs are estimated to be in the billions, and an upward trend is expected. The literature on contributing factors to this problem is extensive. For the purpose of this article, the causes of these disorders will be broken down into their two most basic categories: unsafe work conditions and unsafe acts. Differentiating between these two is not always a simple task. For the purpose of this article, unsafe work conditions will refer to those work tasks that, because of their design, place an employee at increased risk of injury. Unsafe work acts, on the other hand, are those movements and activities that place workers at increased risk of injury when there are safer alternative methods.

An example of an unsafe work condition would be a 50-pound motor that has to be lifted at arms reach because the die is positioned in such a way that there is no alternative method. An unsafe work act is neglecting to use a hoist in this same situation if one is available.

EMPHASIZING UNSAFE ACTS

While unsafe conditions and unsafe acts need to be given equal attention in a comprehensive injury-prevention program, the emphasis in many programs has been placed on altering workplace design. This is evidenced by the abundance of ergonomic articles appearing in the

literature.¹⁰⁻¹⁵ While this approach has been proven to be successful in numerous cases, industry must be aware that it addresses only one aspect of the problem.

Buying a hoist to lift a 50-pound motor will eliminate the risk of lifting. However, this effort will be effective only if the employee chooses to take advantage of it. Buying an ergonomic chair does not reduce the risk of back problems if the employee does not learn to use it effectively; a hydraulic lift table does not reduce back problems if it is never adjusted properly. Working safely is often a choice. If employees are not made a part of the injury prevention and management process, their choices will only be based on past experiences and habits. Educated choices require education.

In addition, it is understood that cumulative trauma disorders of the back, neck, arms, wrists, and hands are a function of both work and home or recreational activities. If this is the case, reducing the number of keystrokes per hour or providing an assistive device for lifting only addresses the problem as it relates to work activities and is therefore only a partial solution. Industry would be naive to believe that they can eliminate all the risk factors through design changes. Because it is often impossible to identify the precipitating factors leading to an injury, numerous musculoskeletal injuries will be classified as "work-related" injuries regardless of where they occur, and industry will bear the costs. It behooves industry to address this problem with a solution that is as comprehensive as its cause.

DEVELOPING A STRATEGY

The first step toward addressing unsafe work conditions is to define them. This has been achieved to a certain degree through the development of the NIOSH standards and information that has been published in health and safety journals.^{1,2} By breaking tasks down into tangible items such as height, weight, distance, and repetitions, the consultant can begin to formulate a plan to alter the source of the problem. Identifying the source of unsafe work acts

is a more difficult undertaking. One must only be asked "Why do you do what you do?" to understand the complexity involved with developing an effective strategy.

In general terms, unsafe work acts can be attributed to:

1. Communication problems within the facility
2. Negative attitudes
3. Poor physical condition of the employee population
4. Insufficient knowledge on how to perform the job safely
5. Depression/anxiety/stress
6. Lack of proper supervision
7. A combination of the preceding and/or other factors.

As can be seen from this list, the risk factors of an industrial injury go beyond the height, weight, and distance requirements of the job. The relationship between attitude or depression and risk of injury has been receiving more attention in the literature. Articles have been written on the psychosocial aspects of injury that not only address the effects of the injury, but also uncover psychological profiles that can help identify those employees at increased risk of accident/injury.⁶⁻⁸

Clearly, industry does not operate in a vacuum. If this were the case, enlisting employee and supervisory participation would be a much simpler task. A truly effective program must address the physical environment as well as the behaviors, attitudes, knowledge, and physical condition of all involved.

PROGRAM DEVELOPMENT

As noted elsewhere, the most effective injury prevention and management programs use a comprehensive approach. A comprehensive approach generally includes the following activities:

- meetings with management
- development of a task force
- work-site evaluation
- employee-education programs

- supervisor-education programs
- strength and flexibility assessments
- review sessions
- ongoing consultation
- on-site stretching program
- periodic meetings of the task force to update the safety program
- development of an incentive program

Additionally, there are two activities for injury management rather than prevention that also require the support and participation of the employees. The first is a return-to-work consultation. The therapist visits the work site after the patient is discharged from the hospital or diagnosed by a physician. The purpose of this visit is to ensure that (1) the job falls within the restrictions set by the physician and (2) that the employee and supervisor are aware of work methods that will reduce the risk of reinjury.

The second action involves the development of an effective return-to-work program. Many companies maintain a 100% rule. It is up to the therapist to demonstrate that this can be a very costly way to do business, especially when management considers the dollars that can be saved with an effective alternative productive work program¹⁶ and the overall effect on the employee's recovery.¹⁷

ENLISTING SUPPORT

Before providing an injury prevention and management program for an industry, the therapist must identify who the client is. While trying to sell the management on buying the product, the therapist, in most cases, is also trying to sell the supervisors and employees on implementing it. While achieving the first phase and having a signed and sealed contract to provide services for the second phase may go easily, winning employee compliance is not something that can be taken for granted.

The best way to get to know the clients and their needs is through meetings with management and the task force. Try to assess management's level of commitment to the program. Are they paying lip service to the employees

and their insurance company or is safety a priority just like quality control and productivity? The most effective way to enlist management's support is by thoroughly understanding what injuries cost and by laying out what can be done to protect the bottom line. As a consultant, the therapist's priorities may be very different from management's, and no value judgments should be placed on a firm's decision-making process. However, a review of other companies' strategies for organizing a safety program will help the therapist during discussions with management.^{18,19}

ENLISTING EMPLOYEE/SUPERVISORY SUPPORT

Enlisting employee and supervisory support is much different from enlisting management's. The following section examines each of the program components mentioned earlier and briefly outlines methods that, depending on how they are perceived, can either increase or decrease participation. This issue should be brought to management during the initial stages of program development. Management's commitment and willingness to follow through on these activities and to empower employees is a critical component of program success.

Developing a Task Force

Developing a task force is one of the most important factors for gaining acceptance of the program. Ideally the task force will be made up of representatives from the following: management, supervisors, employees, union (if appropriate), physician affiliated with the company, insurance company, and injury-prevention specialist (occupational/physical therapist). The focus of this group is to formulate an effective program based on a full understanding of the group members' issues. The formation of this group provides participants with a critical element for success: ownership of the program. It is imperative that each group affected by this program, particularly the employees, feel that

they have some input in the direction this program will take.

Following the meetings, all members must form a liaison between the task force and their peers. These task-force meetings need to address not only logistical issues, but also the issues of attitudes and communication and how obstacles can be overcome. For example, the therapist can say, "I am a therapist, and my experience has been that these components work. You people work here and understand the system here. How can I take what I know and combine it with what you know to make this thing a success?"

The focus group should meet regularly to ensure adequate communication, and the minutes of the meetings can be posted for the general employee population. While therapists are considered to be the experts in this area, one very critical skill is essential in this environment: the ability to listen.

Work Site Evaluation

First, make sure management and supervisors inform everyone of your impending visit so you won't look like a private investigator. Second, and most important, you must talk to the workers. All too often individuals tour a plant and observe the machines as if the operators do not exist. This is an arena where many of the employees will form their first impression. If you relax, ask plenty of questions, and listen, this will ease that first meeting.

Here are some other things to keep in mind:

- Be willing to get your clothes dirty.
- Bring a camera that is easy to use. Employees are not impressed when you spend more time figuring out the f-stop than listening to what they have to say.
- Because therapists often get paid to watch other people work, be prepared to put on a pair of gloves and try doing what they do. You will gain more credibility and insight by doing than you will by writing.
- Ask for opinions. One common error is for an outsider to come up with a wonderful idea, take all the credit for it, and then find

that an employee who has been working on that job for 14 years had the same idea 5 years ago and nobody acted on it. It is wiser to ask people if they have thought of any way to change the job and, if so, did they verbalize that to someone. More importantly, did anyone act on this recommendation?

- Take a lot of pictures. But be careful; many employees do not like surprises and they should be asked for their permission to be filmed. If they do not want their picture taken, respect that desire. On the other hand, many people love to be photographed. These photographs (slides or video) can then be used in the class to customize the program, increase interest, and, in many cases, add some humor to the program.
- When writing up observations and recommendations, be sure to include the names of individuals or departments who contributed ideas.

KNOWING YOUR LIMITATIONS

Consultants may be called in to help redesign or modify a workstation. Their first response should be to make sure that the people who work at this station are present to lend their input. Someone from engineering should be present as well as someone from the company's workshop or tool-and-die department if they have one. The therapist is there to provide expertise on injury prevention. The engineer is there to look at the engineering component, the tool-and-die person to look at the possible tooling of new equipment, the supervisor to look at the production issues, and the employee to add the hands-on expertise. None of these individuals can supplant the others.

Be aware of what changes are feasible and what are unrealistic. From my own experience, I once submitted a beautiful work site-evaluation summary to a safety committee. They all patiently read through it and smiled and told me they were very impressed. They said that if they followed through on my recommendations,

their injuries would certainly decrease because they would have to lay off all of their employees to afford the changes.

Employee Classes

This is a critical component, but the information presented should not be expected to change these peoples lives. It is *their* class and it asks them to take on more responsibility by recognizing them as a critical part of the program. When putting together the class, keep in mind that this is a program that is being done *with* employees, not *to* them. Employee acceptance has at least as much to do with how the therapist presents himself or herself as with the information presented.

Put together a program that takes into consideration how people learn best. Some populations do better with a lecture, others with participation and actual problem solving. When working with the industrial population, keep the groups relatively small (no more than 20-25), the length of the class relatively short (three hours maximum with frequent activity breaks), and the information basic since human beings in general are unable to absorb a great deal of information in a short period of time.

Discover what is relevant to the population at hand. What can these people actually use? There is much debate over the amount of technical and practical information that is necessary. Make it a habit to err on the practical side rather than on the technical side. Is it critical for the class to be able to identify every structure in the back or upper extremities? Certainly, understanding some of the basics of anatomy and biomechanics is important. However, the information should be important to the employees; it should focus on things that they can use.

Many people bring to the class personal issues, such as marital, physical, emotional, and financial problems. These are real people dealing with real-life situations. The presentation given should show that these concerns have been taken into consideration. Following a discussion on exercise, you may be confronted by a person in the class who has four kids and two

jobs. This situation could certainly make finding time to exercise a difficult task. Recognition of this real-life issue can lend credibility to the presentation. One response in such a situation is to tell people that while they may have limited time available for exercise, what they really don't have time for is an injury. In this way, this individual's situation is recognized but the importance of exercise in reducing the risk of injury is not diminished.

PRESENTATION STYLE

Because this class is generally the most visible component of the program, it is important that the participants leave with a sense of confidence about the therapist's abilities and a feeling that he or she is committed to making this work. Following are some tips for putting on an effective class.

1. *Know the material and be comfortable with it.* The audience will lose interest and the therapist's credibility will suffer if he or she takes notes up to the front and reads from them. Also, be sure to know the material well enough to answer questions.
2. *Encourage the employees to make comments or ask questions.* After presenting some information, ask them, "What do you think of that?" or "Will that work for you, and if not, why not?" Wait until someone feels uncomfortable enough to say something. They need to know that they are as critical a part of the presentation as the therapist. While it is important to encourage questions, don't let anyone monopolize the class. There are numerous ways to direct the attention back to the subject. Tell them that they have a good point and that it will be addressed later in the program, or that this is a good question, but it would be best saved for the end of the program. Putting the responsibility back on them to ask the question again at the end takes the therapist off the hook.
3. *Practice.* Improve your public-speaking skills by joining groups such as toastmasters, by speaking at local business and civic group meetings, and by presenting programs in your own clinic or hospital.
4. *Be willing to be funny.* Humor helps people remember.
5. *Be honest.* Most people can see through insincerity or a lack of interest on the therapist's part. This can leave the employees with a bad taste in their mouths for injury-prevention programs and reinforce a negative attitude toward management for making them sit through this. If doing this type of program isn't interesting, don't do it.
6. *Get people moving.* Most of these people are used to moving around most of the day. In addition, many people learn experientially; in other words, they need to put words into action. Give them frequent standing breaks. Get them on the floor and have them stretch. The motivation to stretch will *not* come from what you say, but rather from what they experience when they attempt the stretches.
7. *Try as much as possible to schedule the classes to take place during work hours.* Try to be introduced by the highest-level management person available, and encourage management to arrange for the employees to receive a manual that covers the content of the program. This provides them with something to remind them of the program and further indicates management's support.
8. *Remember to convey the purpose of this class to your audience.* Back classes are not, in and of themselves, an injury-prevention program. They are the introduction, the catalyst. Tell each class that sitting and listening to the talk is the easy part, while the hard part starts when class is over and the program actually begins.

Supervisor Sessions

This component is critical because the degree of employee participation will depend a great deal on the reinforcement provided by the supervisors.

Many of the unsafe acts performed are the result of habitual behaviors. For this reason, behavior modification is a valuable tool. Without

an effective behavior-modification program in place, the long-range effects of education are questionable.²⁰

The supervisors are in a unique role to lead this portion of the program. Prior to recruiting their support, however, a few things need to be considered.

POSSIBLE BARRIERS TO SUPERVISOR PARTICIPATION

Four barriers to supervisor participation stand out:

1. Supervisors may not appreciate this added responsibility. They are already responsible for productivity and quality assurance and that is keeping them busy enough.
2. Supervisors may not have good rapport with the people in their department.
3. Supervisors may not have good communication skills.
4. Supervisors may think that this is a dumb idea: "We've gone this far without it. Why start now?"

One of the best ways to attack these barriers is to bring the issues up during the supervisor-training sessions. In many instances, ignoring a problem can be more destructive than recognizing it.

Find out how much of the supervisors' time is spent trying to find replacements for injured workers or trying to find some light-duty work in their department. They have to see how they will benefit from following through with the plan.

Be sure to recognize their concerns. This program may mean that they have to approach and talk to employees that they do not care for. They may also be great at supervising production, but their interpersonal skills may be lacking. One example is a company that put its supervisors through an eight-week human-relations course in order to help them communicate better with the people in their department. The loss-control manager said, "If nothing changes, nothing changes. If we couldn't

communicate well with our people before, and we don't change anything, we can pretty much expect that we won't be able to communicate well with them in the future."

FOLLOW-UP ACTIVITIES

In nearly all cases the follow-up activities are the most critical part of the program. Immediately following the initial classes, many employees will begin questioning the company's commitment to the program. Management support of ongoing activities is the catalyst to continued employee participation.

Strength and Flexibility Assessment

This assessment provides individuals with an assessment of their strength and flexibility status, and provides them with exercises that are specific to their needs. This adds to the idea of "self-responsibility" and indicates that the company does recognize that while the employees are members of a team, they are also unique individuals.

Review Classes

Most review classes cover the high points of the previous classes and then open up the floor to questions and discussion. Have they been able to apply the information discussed and, if not, why not? Have they tried the stretches covered and, if so, how do they feel? By coming back and giving them a structured forum, the therapist is indicating to them that this safety program is a dynamic process. It is more effective for the review classes to be frequent (every few months) and brief rather than longer and less frequent.

Continued Task-Force Meetings

These meetings are critical. While the therapist can continue to offer recommendations on the direction he or she would like to see the program go, the therapist's ideas and goals must match those of the participants or the whole program can be rejected. This environment of give and take can lead to effective solutions.

Maintaining the task force recognizes that the ownership of the program still lies with the participants.

Ongoing Consultation

Initially employees may wonder about the commitment to safety when the therapist has only been in their plant four or five times. But, after innumerable visits over an extended time period, it becomes harder and harder for workers to deny that there is something going on. Problems and questions are constantly coming up in an industry. One of the ways to address this is by scheduling a certain number of hours per month for a work-site visit. The employees and supervisors can anticipate when the visits will be and can arrange for a visit to their department. Try to leave each supervisor a card so they can call with questions or schedule a time to come in if a question deserves immediate attention. Again, this tells the employees that this is their program. The therapist's expertise is available, but much of the responsibility lies with the workers and how they decide to use the therapist.

On-Site Stretching Program

Because of the high emphasis on exercise in some programs, many employees at some point will ask why the company won't build a gym. This is when the therapist looks toward the back of the room and sees someone from management starting to sweat. You do not want to back management into a corner by telling the employees that you also think that a gym is a good idea. On the other hand, you still need to respond to this question. One response is to ask this individual, "How often do you exercise?" Ask them if they are willing to stretch briefly throughout the day as a part of their job. If the response is negative, follow up by asking, "If I can't convince you to take brief periods of time during the day to warm up and stretch, why should the company think that you will make good use of a gym?"

Encourage the employees to work on periodic stretching throughout the day and give them specific stretches to work on. Initially

make it a voluntary program and encourage those who benefit from it to pass on their experiences to those who are hesitant to try. Then work with the supervisors on methods to reinforce these behaviors. One company developed a format where four times during the day, employees have the option of either going right to work or taking five minutes to go through a series of stretches.

In some facilities, due to the nature of the work (fast pace, repetitious nature, incentives, etc.) and the specific population, it is advisable to create a policy for stretching. In order to get the best compliance with the least amount of problems, it is often best to present the employees with an optional program first. Once the program is going, you can work with specific departments to help them come up with stretches that address the body parts and movements used most frequently on their job.

Incentive Program

Incentive programs are sometimes referred to as "bribes" for keeping people healthy. If used appropriately, these programs can be used not as bribes, but as a way of recognizing an individual or department for safe work practices. For example, one company I work with has an award catalogue divided into four quarters. Each quarter has a wide selection of gifts, and each quarter they go up in value. People who go one quarter without an injury can pick a gift from quarter one, or they can pass and try to go another quarter without getting hurt and pick from quarter two and so on. All the gifts in the catalogue were chosen by employee representatives.

Other incentive ideas include:

- Safety Bingo. (Every week without a recordable injury a number is drawn. The winner gets a company jacket.)
- Department of the month. (Winner gets a plaque.)
- Supervisor of the month (plaque and cash award).
- Supervisor of the year (bigger plaque and bigger cash award).

- Safety banquet (formal affair catered by the company).
- Quarterly newsletter. (Focus can be on departments, shifts, personal accomplishments, etc.)
- Profit sharing. (Employees need to know that injuries take money from this program.)

There are numerous programs on the market and many firms whose sole purpose is to help companies put these types of programs together.

MANAGEMENT'S ROLE IN ENLISTING EMPLOYEE PARTICIPATION

I have saved this part for last because management, in all cases, will have the final say in what can be done as well as how, where, when, and why it will be done. Management will have a direct impact on the level of employee participation. For that reason, carefully think through all the issues that need to be addressed, what pitfalls to avoid, and how to present information to managers in a way that helps them see the benefits they will receive for their efforts.

1. *Does management see this as a long-term project?*
Be prepared to present management with the literature that supports the need for ongoing services. Small investments over longer periods of time will protect its initial investment.
2. *Will there be financial backing for follow-up services, ergonomic changes, incentive programs, etc.?* Be aware of what the injury problem is currently costing a firm. Again, having literature available that identifies actual dollar savings is critical.²¹
3. *Is management willing to mandate new responsibilities for supervisory personnel? For employees?*
This is a tough question and one management may need to think about for a while. Most companies mandate the wearing of safety glasses and safety shoes, but employees are allowed to perform their jobs any way they choose. We now know enough about cumulative trauma disorders to un-

derstand that not only must we teach people how to work more safely, but we also need to reinforce these behaviors through policy.

4. *Can a communication system be developed that allows for employee or supervisor concerns to be responded to in a timely manner?* One company devised its own safety data sheet. When an employee has an idea for an ergonomic change, a piece of equipment needs to be fixed, or a safety hazard has been identified, the employee fills out one of these triplicate forms. One copy stays with the employee, one copy goes to the supervisor, and the third goes to the safety committee. It is company policy that the form must be responded to within a 30-day period (less if it is deemed an immediate hazard). Often, the fact that there was a response, more than the content of the response, encourages employees to keep speaking up.
 5. *What are the goals of the program, and whose goals are they?* As I mentioned earlier, there are really two clients: management, who is footing the bill, and the employees, who are expected, to a great degree, to carry out the bulk of the program by working safely. It is ideal when the goals of management and the employees emanate from the same source. Unfortunately, the initial response by management in many cases is an acute reaction to high Workers' Compensation costs. When this attitude exists, it empowers the employee population, but not in a positive way. It offers them control over the company's injury-related costs. They can, in essence, experience an injury and cost the company money, or they can prevent one and save them money. This is not to imply that all injuries are the result of a conscious effort by employees. It does imply, however, that true prevention is a conscious effort and this effort can be undermined by an adversarial management/employee relationship.
- Inform companies that their best strategy for enlisting employee participation is to be proactive and to address problems before they get out of hand. If they do not, and most companies do not, consultants will

likely overhear the employees saying, "Here comes another program. Must have been a bad year for comp."

6. *Will management go out onto the floor and become an active participant in the program?* This is a very sensitive issue. In many companies, management does not go out and interact with the employees. As a result, an air of "us" and "them" is created. It is when a company bridges this gap between the front office and the floor that the greatest success can be achieved.

SUMMARY

The purpose of this article has been to examine the role of management, supervisory, and

employee participation in a comprehensive injury-prevention program. Management and supervisory commitment to the program has been found to be paramount in enlisting employee support. Programs over the years have often been approached as something that is done *to* rather than *with* the employees. For a program to work, consultants must first convince management that viewing employees as expendable is costly to both the employee and the company. As industrial consultants, you will be stepping out of your world and into theirs and must tailor your programs accordingly. By taking their issues into account and truly listening to the needs of your clients, you can help companies develop a genuinely comprehensive approach to injury prevention.

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