Five Strategies for Improving OSH Training Program Effectiveness

By Rick Gehrke

Supervisors and leaders want to encourage specific behaviors and habits to ensure productivity, prevent injuries and ill health, and retain employees. Critical to this is monitoring and improving the effectiveness of the organization’s OSH training.

In this article, the author shares insights accumulated from more than 25 years of industrial experience.

1. Identify the Training Program Leader

If your organization does not have someone responsible for safety and health training, evaluating effectiveness and working on continuous improvement, it is time to get one immediately. Avoid the temptation to tack this on as a side job for the maintenance, human resources or production manager; they are already busy enough, and the safety and health leader needs to focus on the fundamentals of the role.

Dedicating a leader for the safety training program will help to ensure that someone is not only accountable for leading the team in the direction it needs to go, but also empowered to make good things happen. So, how do we choose that champion and how can we best provide support?

First, find someone who wants the role. We can train and educate people for skills, but passion comes from within. We can “volun-tell” someone for the job, but before making that move, look around the workplace for someone who is seeking a challenge and an opportunity to move up and forward. A safety and health leader is a strong individual with the desire to protect others. This person will have the character needed to inspire the team to promote OSH performance not because “it’s the rules” but because it keeps everyone at work safe and healthy.

When I encountered my first opportunity to be an EHS manager, I had an environmental science education, but no safety background. I learned by trial and error; trust me, this is not the right way to learn that job. When coaching a new OSH leader in an organization, make sure to give the person any training needed to get started right. To quote Richard Branson, “Train people well enough so they can leave. Treat them well enough so they don’t want to.”

I recommend, at a minimum, the OSHA standards course that applies to your industry followed by the related instructor course. While the initial course fees and travel expenses may sound costly at first, the price of not taking the courses is even more expensive. Consider this: According to National Safety Council (NSC, 2020) estimates in 2017, the cost for a medically treated injury was $39,000 and the cost per death was $1.15 million. If the investment in that training prevents a single medically treated work injury ever, it will have paid for itself.

2. Support the Training Program Leader

To turn a familiar phrase around, with great responsibility comes the need for great power. Ensure that training leaders have the authority and resources they need, including time and budget. This also includes the time of the people they need to train. In addition to technical knowledge, the safety and health champion needs leadership skills.

Note that I said “leadership,” not “management.” We manage things and lead people. I have seen and personally encountered resistance among the ranks when new OSH programs and rules are implemented. Making these changes effective requires a leader, not a boss, and leaders are made, not born. We need to ensure that we provide learning opportunities for this as well, and I recommend servant leadership as a model. If you’re not already familiar with this concept, I suggest reading James Hunter’s The World’s Most Powerful Leadership Principle: How to Become a Servant Leader as an introduction.

To further strengthen a safety and health program, delegate authority between multiple people at different levels and functions of the organization. While it is good to have a designated leader to keep the program focused and consistent, there are benefits to sharing duties and opportunities, such as generating more ideas for improvement, avoiding leader burnout and gaining buy-in from the workforce. Additional advantages include the transfer of knowledge, supporting succession planning and the development of future leaders. As with the program leader, we want our support team to have the necessary competence and resources to be effective.

3. Know Your Starting Point & Establish Goals

How can we tell how far we have come if we do not know where we started? Consider your baseline and evaluate the following:

• What does the training program include?
• What kind of incident records are kept?
• What is the organization’s history of reportable injuries, first-aid injuries, near-hits and so forth?
• Does the OSH program consider psychosocial hazards and, if so, do you keep track of complaints of bullying, harassment, overwork, long hours and shift work, and anything else that can negatively affect worker well-being?
• How are you treating these hazards within your OSH program?

While psychosocial hazards may not be regulated under OSHA, they are included in the scope of ISO 45001, so if you have a management system following that standard, these issues must be addressed. If you have hit a plateau (e.g., in reducing injuries and physical illnesses), consider improving employee mental health as a new frontier with more opportunities to provide a healthier workplace for yourself and coworkers.

Measuring existing safety and health performance, training program and behaviors, and comparing that to the desired state gives a good understanding of the starting point of the program and what is needed to make it better. When that performance baseline is established and documented (be sure to document everything), set improvement goals. I recommend following a proven model such as SMART: specific, measurable, achievable, relevant and...
time bound, or the objectives requirements in ISO 45001.

When these goals or objectives are established, develop plans to achieve them. If these plans involve changes in thinking and behavior, some type of training will be required, so consider in advance exactly how and when to measure progress toward carrying out the plans and the effectiveness of your efforts. Identify:

- exactly what kind of training will be provided and for whom (specific)
- how to track things such as completion, retention and effectiveness (measurable)
- availability of all required resources including time, talent and budget (achievable)
- whether the planned actions are consistent with the desired outcomes and whether any undesired side effects have been considered (relevant)
- whether the time frame for completion is reasonable (time bound)

Do not rush or skimp on the planning stages; you may have a lot of ground to cover, but that is OK. All you need to begin is your position (what you have), your destination (what you want), a map (your plan) and a compass (your leadership).

4. Monitor & Measure Performance

In the planning stages, we decided how to measure progress toward our goals. Things we decided include what we will measure, how to measure it, who will do it and when they will do it, in detail.

- Think about key performance indicators. These include reportable injuries, first-aid injuries, near-hits and complaints. These indicators are used to establish a performance baseline. These are all examples of lagging indicators, which provide a reactive measurement after the fact. In addition to lagging indicators, utilize leading indicators, which are things being done proactively to prevent injury and ill health. Safety meetings, training events, shift huddles, toolbox talks, health campaigns, risk predictions and daily 5S inspections are examples of leading indicators.

- Warning: Leading indicators are “all the rage,” and some even claim lagging indicators are ineffective for measuring the effectiveness of safety programs. This is not the case. We want to use both. In the OSH program, use leading indicators to drive positive changes and lagging indicators to measure effectiveness. For example, suppose you have identified hand tool injuries as a frequent occurrence at a facility and you have set an objective to reduce their frequency. Part of the plan to accomplish that objective is to include a leading indicator, having supervisors deliver daily huddle talks that include this topic (a type of training), and a couple of lagging indicators, observed safe hand tool use and the number of hand tool injuries. Tracking leading indicators will record the training events (completion, frequency, content, attendance), while tracking lagging indicators will tell you if people understood and retained the training and whether it resulted in fewer hand tool injuries.

- Be honest with yourself when tracking incidents. I once audited an organization where a maintenance tech tried to remove a bolt with the wrong tool and bashed himself in the nose with a big pipe wrench, causing cuts, bleeding and a large bruise. The organization actually classified this as a near-hit. Do not be the company that tries to show a good safety record by hiding things. For the employer, anything that discourages employees from reporting injuries and illnesses is not only illegal but also puts the entire workforce at risk.

While we may put policies in place with good intentions, they can backfire. For example, linking management or supervisory bonuses to lower reported injury rates or fewer audit nonconformances can result in unintended consequences. Discriminatory practices include disciplinary action against employees who are injured or who report on-the-job injuries under certain circumstances.

5. Evaluate & Communicate Training Effectiveness

After some predetermined period, we will have collected a data set that includes the baseline, objective and the leading and lagging indicators of the hand tool safety campaign. In the analysis of performance, it is useful to evaluate correlations between the two. How do the leading indicators influence the lagging indicators?

If you are not personally into statistical analysis, find someone in the organization who enjoys it and get that individual involved in the safety and health program. We are measuring performance scientifically, and when we have answers, we want to communicate them effectively to different audiences and have solid data to back up our conclusions and recommendations. If we find a positive correlation between increased training and decreased incident rates, we may conclude that the campaign was successful.

Note that you may discover some unexpected results. Suppose you find no correlation between increased training and decreased injuries. This could mean many things. For example, if the results show that the training is being completed (leading indicator) and people are following correct procedure per the training (lagging indicator) but the injuries continue, there may be no amount of training that can reduce hand tool injuries. The problem could be the tools themselves and not how they are being used. In this case, the training program was not a failure, it is just evidence that another approach is needed.

Performance metrics are typically more useful when they are normalized or indexed to other metrics. Once the activities you begin implementing become habits, you can measure the impact they have on other plant performance metrics such as productivity, downtime and yield. This information is important to have in interactions with other departments. To get the cooperation and resources needed to run an effective program, it is necessary to make a cogent and well-supported argument that addresses the other person’s priorities and responsibilities.

Finally, a good training program will often produce an apparent spike in incidents. Do not worry, this usually means that people are learning to spot problems better, becoming more likely to report them and helping to prevent injuries in the future. Welcome this information and make sure the program encourages and empowers everyone to be more observant and more willing to report both positive and negative behaviors.

References

Rick Gehrke is a senior environmental, health and safety consultant at Intertek Alchemy. He has 25 years’ experience in industries such as food production, automotive and aerospace manufacturing, government and defense, electric power generation, and chemicals. He is a veteran environmental, health and safety consultant, auditor and trainer. Gehrke is a certified management systems lead auditor with experience in ISO 14001, OHSAS 18001, ISO 45001, ISO 50001, LEED green building certification, business development and certification program management. He holds an M.S. and a B.S. in Environmental Science from University of Tennessee, Chattanooga, and an A.A.S. in Intelligence Collection from Community College of the Air Force.

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