

Behavioral observation: gathering data for continuous safety improvement

Patrick Killimett

The concept of using observers in the workplace is not a new one. There are many situations in industry where one employee is the "helper" of another. A prime example of this is in the utility industry, where it is common for linemen to have helpers. The helper stands on the ground and keeps an eye on the lineman while he or she works on the power pole. The helper's job is to monitor the ropes and the lineman's activities to make sure he does not expose himself to injury while working. The helper is, in effect, an observer of the lineman.

Often, when the idea of doing observations is introduced to the organization, people think the process will be a snap since they have done it in the past. The observations they are thinking of are generally safety audits. Supervisors, first-line supervisors, department superintendents, and managers, as well as the hourly employees (in some organizations), have had the experience of doing a safety audit. With the behavior-based safety process, we must not only look at audit items but also shift our attention toward employee behavior. We want to look at what people are or are not doing. When they are working, are employees engaging in behavior that increases or decreases the risk of injury?

Types of observations

There are two types of observations that we would like an observer to make. The first type is situation centered. A situation-centered observation is one where observers let the situation show itself to them. The observers look for factors that might be causing people to expose themselves to injury. The goal is to approach the job with a fresh set of eyes. Observers should look at the job as if they had never seen it before and try to identify areas where people could potentially be injured.

For example, suppose you are an observer and you walk into an area that has a lot of piping. There is a valve high up off the ground that must be periodically cut off and on. You notice there is an indentation in the pipe. From that indentation, you know that people have been climbing on it, and it is very probable that people were climbing on the pipe to cut the valve off and on. Sooner or later, somebody will slip, fall, and be injured. If the situation is not corrected, a serious injury could happen.

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Situation-centered observations are often talked about in terms of spotting a footprint. Very literally, there are two ways to identify that someone has walked on the beach. The first is to actually see the person walking. You witness the behavior taking place. The second way is to see the footprints in the sand. In this case, you never actually saw the person, but you know that someone has been there. Similarly, the indentation on the pipe lets you know that people have been climbing on it.

Let's look at another example. Suppose there are 75 pounds of material to be lifted. Normally, a mechanical lifting device is available for that purpose. You enter the work area and see that the device is off to the side and is in disrepair. Clearly, it is not being used. How, then, is it that the material is being lifted? Chances are that someone is lifting the material, overexerting himself or herself, and risking potential strain. These are the sort of indicators that you look for in situation-centered observation.

The second type of observation is guided by your inventory of critical behaviors. As an observer, you know what the items are. You are very familiar with the operational definitions. The critical behaviors on the inventory have caused people to be injured in the past. The categories that appear on the inventory might include personal protective equipment, proper tool usage, or body placement. As an observer, you should have a clear idea of which behaviors fall into each of these categories; you are on the lookout for safe and unsafe examples of them. The inventory of critical behaviors gives you a structure for a systematic observation.

Observation skills

The following are some of the basic skills that an effective observer will need.

Focus on behavior

The observer must develop the ability to focus on and recognize the critical behaviors. As indicated earlier, it is common for us to go out and make safety inspections, and as a result, we are very skilled at looking for conditions. We do not typically go out and look for behaviors.

Record what is seen

When an observer sees safe or unsafe behaviors, that information must be recorded. The observer must be familiar with what items are on the inventory of critical behaviors, what

their operational definitions are, and how to record the observations on the data collection sheets where the critical behaviors are listed.

Give positive feedback

One of the most important pieces of the observation is relating back to the individual or group of individuals being observed. What is it that the observer saw? Observers should give positive feedback for safe behavior—those things that people are doing safely—because the goal is to encourage that behavior to happen again. Observers also need to identify risky behavior in a nonthreatening way. The observer wants to lead a person to think about “What is it I did and what can I do differently?” Discussion should be encouraged between the observer and the person being observed with regard to what can be done to eliminate or minimize exposure in the future.

Observations should never be done in a secretive manner. Everyone should be aware that observations are happening and their purpose. There are no people hiding behind columns or in doorways trying to catch others doing things wrong, as it were. In fact, the point of an observation is to catch people doing their jobs correctly and to give recognition for their good performance!

Compile data to show performance

Another reason for doing observations is to gather data and track progress. Therefore, the observer needs to know how to tabulate the information. The results of observations are calculated in terms of percent safe behavior. We specifically refer to percent safe as opposed to unsafe because we want to approach safety from a positive standpoint. The emphasis is on improvement, not blame or punishment. The opportunity for a group of employees to see data that show trends in the group's performance provides reinforcement for continued, safe behavior or the basis of discussion on how performance can be improved.

Doing an observation

When making an observation, the observer must go where the action is. Observations should be done while people are performing their normal jobs. Observers should take those snapshots at various parts of the facility, looking at a variety of jobs and at various times during the day. Making observations is a systematic sampling process. Ultimately, over time, everybody will be observed and all the job types will be observed. Through the accumulation of this series of snapshots, enough data will be generated to get an accurate picture of a site's safety performance.

Before beginning an observation, let the person or people you are observing know when the observation is taking place. Introduce yourself if you do not know them. You want people to know what is happening and encourage them to participate. Afterward, go through the two types of observation. Start with the situation-centered observation. Walk around the area. Look at everything. See if you can spot any footprints. Continue your observation based on the items on the inventory of critical behaviors; let them guide you through your observation. Record the data as you go.

Next comes verbal feedback. You want to tell the person or people you observed what you found. Feedback should start off by focusing on safe behaviors so they are reinforced and the probability that those behaviors will reoccur in the future is increased. After you have discussed safe behaviors, talk about the unsafe or risky ones. Be careful not to accuse the individual or place blame. This can be avoided by using phrases like: “I noticed that”, “I was concerned with this”, and “Did you realize this was happening?” Follow up this line of discussion by asking the question, “What can we do differently so that next time exposure is not there?”

Notice that we are not placing blame, not pointing fingers. Instead, we are generating discussion around a particular risky behavior. The goal is to get the person thinking about those behaviors so that next time he or she will think about it and perform the behavior safely.

Verbal feedback is followed by recording the results of the observation on a feedback chart. The crew's feedback chart should be posted in a conspicuous place. The observer should calculate the percent safe and plot that number on the chart. When reviewing the data, the observers and crew should avoid focusing on any given number. The trend is what is important. Is that trend up or down? Is the group's performance improving? If not, what can be done to change that trend? Is there an area the group needs to be concerned about?

The most effective feedback charts are centered around small groups. The groups meet periodically to use the observation data as a tool for problem solving. Small group sizes are also desirable so that members feel their individual performance can have an impact on the trend. If the groups are too large, the tendency is for the employees to believe that they cannot have an impact on the numbers, no matter what they do. That belief inhibits employee involvement.

The whole observation process takes an average of 20–30 minutes. That includes getting the critical behaviors data sheet, making the observation, giving the feedback, and posting the percent safe on the feedback charts.

Improving observation quality

People are very familiar with the work going on at their site. In some ways, this can become a problem. When employees are extremely familiar with the work, they may not see the risks. They have done the task so many times themselves that they do not recognize they are exposing themselves to injury. For example, in the infant care business there is a definite method for stacking disposable diapers. If those diapers are not stacked exactly right as they are packed into the container, they jam the machine. At one time, it was an informally accepted behavior to reach into the moving equipment to pull out a diaper that was not stacked neatly, thus preventing the machine from jamming. People who were doing that did not recognize that they were exposing themselves to a hazard by putting their hands into moving equipment. They could have easily gotten their hands caught and pinched. At that time, if any of those individuals had been an observer watching someone clear the jam they would not have thought of that behavior as risky.

Not being familiar with the job can also pose a problem. When observers are making observations, they know what a critical behavior is. They are very familiar with the definitions. However, if observers are not familiar with what the workers are doing, they spend a lot of time trying to understand the process. The observers' attention becomes focused on the activity and its end result, as opposed to watching the worker's behavior in completing the task.

Early in the process, observers are quite frequently not as familiar with the definitions as they could be. They go out, observe a behavior, and spend a proportionately longer time looking at their data sheet searching for the appropriate place to record what they have seen. While they are studying the data sheet, observers are not able to watch subsequent behavior. Behavior happens fast. If an observer is concentrating on the data sheet as opposed to the actions taking place, he or she will miss a lot. Unfortunately, doing an observation is not like watching a video. If it were, you could rewind the tape, look at it, and listen to it again to catch what was missed. But in real time, you cannot do that. You cannot ask someone to stop what they are doing, back up, and do it over again. If you miss the behavior, you miss it.

Finally, the observer needs to be prepared to manage resistance to change. As with any new process being introduced into the organizational culture, resistance will occur. People will resist change because they are comfortable with the way the system has operated in the past. Change is often

interpreted to mean that what they have been doing in the past is not good.

One way an observer can manage resistance is by getting input from the people being observed. Get them involved. Make sure that you explain what the observations are about. Answer any questions that they have. Many employees fear not knowing what will happen in the future or not understanding how the change will have an impact on them. These types of fears can be overcome by providing information. It is natural and normal for people to resist. Most people will resist change, it is only a matter of to what degree. Therefore, observers should be prepared for that resistance to take place as they are making observations, and they should know how to deal with it.

Behavioral observation is a skill that takes training and practice. However, once the skill is mastered and systems are in place to maintain observation quality, the observation process generates data that objectively highlight the successes of a safety process and signal areas that need improvement. The next step is to use these data to reach your safety goals. In my final article of the series, I will discuss how to use the data for problem solving and continuous improvement in safety performance. □

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