

Before you begin:

Research your organization's statistical safety performance measures and bring the data to the session.

For example, for the past two or three years: identify the recordable incident rate, number of injuries or illnesses, number of days lost and, if possible, the costs associated with incidents. Injury information can be found on your Occupational Safety and Health Administration (OSHA) 300 logs. Incident rates are calculated based on your annual recordable injuries and illnesses and the hours worked by all employees. Claims costs can be obtained from Ohio BWC.

The process of getting the results is as important as the results themselves. Leading indicators (i.e. activity measures) are behaviors/performance linked to accident prevention. These measures assess results of supervisors, a workgroup, or an organizational action taken before accidents occur. These activities are the key to future success in safety.

MEASURE



PERFORMANCE

Introduction

Many people subscribe to the philosophy of, "What gets measured, gets done." However, measuring the wrong things or areas that provide little useful information can be misleading.

Definitions

Recordable incident rate is a mathematical calculation used by OSHA that describes the number of employees per 100 full-time employees that have been involved in an OSHA recordable injury or illness.

Activity measures (leading indicators) are linked to actions taken to prevent accidents and injuries.

Results measures (lagging indicators) are after-the-fact and include measures such as OSHA recordables, lost-time accidents, severity rates and claims costs. These measures are linked to the outcome of an accident.

Discussion

Pose the following sets of questions to the group to stimulate thinking. Ask the group which statement they prefer in each of the following sets of two statements:

Set 1:

1. Measures that are likely to predict future performance, or
2. Measures that quantify the number of incidents.

Set 2:

1. Measures that focus on identifying opportunities for improvement, or
2. Measures that quantify the costs of injuries.

Set 3:

1. Measures that show how the organization is aligned with a vision for safety excellence, or
2. Measures that quantify the numbers of days lost due to injury.

The first statement in each set of questions refers to safety measures that provide information about day-to-day safety activities. The second statement in each set refers to traditional statistical safety measures. Statistical measures are less useful because they are developed long after incidents occur. They are lagging indicators.

Ask the group to name the measures your organization uses to track safety performance. Write the group's responses on a white board or flip chart. Measures that are likely to be named might include: lost-workday-case rate, severity rate, days lost, number of incidents, or workers' compensation costs. At this point, share with the group the actual statistical safety performance measures you brought with you to the meeting.

Key point: Make sure the group recognizes that the statistical safety measures are lagging indicators of performance and are not specific as to causes. The statistics are valid measures, but other measures of safety performance exist.

The truth about statistics

Safety statistics are assumed to represent an accurate barometer for safety performance. Ask the group what numbers, like incident rates, fail to tell us? See if the group comes up with these answers:

- Statistical safety measures fail to tell us why incidents occur.
- Statistical safety measures fail to tell us what to do to improve safety performance.

In practice, statistics indicate that organizations should agree to preventive actions because of an injury. The numbers also can provide trend information. However, specific data is needed to identify causes and corrective measures.

Key point: In addition to the statistics, it is helpful to measure the level and nature of safety activities that take place in the organization to provide a more complete picture of safety.

Viewpoints

One of the biggest problems in safety has been – and continues to be – measurement. How do organizations measure their efforts and determine whether safety “programs” are effective? Measurement is crucial to achieving excellence in safety from two broad viewpoints: macro and micro. Macro viewpoints are how overall results are measured to determine whether strategic goals are being met and safety efforts are paying off. This viewpoint is typically seen from an organizational level.

Micro viewpoints are measures that direct activities/behavior toward the strategic goals and are seen on a more personal level. The measures should ensure individual performance and not foster nonperformance.

These two viewpoints identify and prioritize business processes, areas, and departments, which need improvement. Measurements form a solid foundation for deciding where improvements would have the most impact.

Ask the group if current safety activities are continued and the organization's incidence rate decreases by 50% next year, what the decrease will be attributed to. After the group discusses their thoughts, make the following point: If measures are not in place that specifically identify different or improved actions and activities, then it will not be possible to identify what caused the statistical improvement. Could it have been luck?

Another point to discuss with the group concerns what the safety statistics measure. Ask the group if the safety statistics measure prevention activities, or if the numbers measure undesirable events. The correct answer is safety statistics measure undesirable occurrences— injuries, pain, and suffering.

Key point: Since safety statistics only measure things you don't want to occur (i.e. injuries), it makes sense to measure activities that you want people to engage in, those that promote safe performance. Examples of these types of activities include: number of safety audits, number of safety problems corrected, amount of safety education, and number of safe behavior observations.

Summarize the discussion by saying safety statistics are useful for providing a broad view of safety performance – numbers on the "safety scoreboard." However, safety statistics are lagging indicators of safety performance and do not represent the organization's day-to-day safety activities.

An effective approach

Since safety statistics do not measure desirable day-to-day, safety-promoting activities, your organization should use additional measures.

Consider measuring the levels of upstream activity that promote safety each day throughout the organization. These activities educate, promote, and facilitate safe operations. An organization that promotes safety performance daily demonstrates that safety is valued.

Conclusion

Just as it is important to measure an organization's financial and productivity performance, so should the safety performance be measured. By measuring safety program performance through leading and lagging indicators, an organization can identify areas that are strong and areas that need additional work. Through tracking safety metrics, safety risks leading to worker injuries and illnesses can be addressed to reduce injury rates and the costs associated with injury claims.

Group Activity

Ask the group to name day-to-day actions and activities that could foster safe performance in the organization. Write the answers on the white board or flip chart.

Review the list of activities generated and identify key safety activities you can implement to help drive desired safety performance every day. Make sure these activities are realistic, achievable, and measurable.

Resources

[OSHA, Safety Pays program estimator](#)

[OSHA, Leading indicators](#)

[Safety+Health Magazine, Measure your safety culture: key metrics](#)