
By Brian Hughes, Vice President of Sologic
A version of this article appeared in the May 2011 issue of Professional Safety magazine.

Many safety departments I work with are good at processing safety incident investigations. They recognize when an incident requires investigation. They check the right boxes, fill in the right descriptions, admonish the guilty in a timely fashion and file the report in the right folder, where it may never be referenced again. Metrics are tracked to ensure that the process stays on target. How many incident investigations are opened? In process? How many closed? No safety manager would deny that report throughput is important, but the most important score to watch is risk reduction. Without a significant organizational emphasis on output quality, risk reduction is left to the individual completing the investigation. Some do a terrific job, but many do not.

So, how do you measure the quality of safety reports in a meaningful method that truly results in risk reduction? Creating and implementing a safety review board (SRB), based on the concept of a corrective action review board (CAB) that is frequently used in the area of quality, can make a big difference in safety report quality. An SRB also will help disseminate important improvement ideas across the organization.

A CAB in quality or procurement is made up of a small, yet diverse group of managers and is chartered with the task of reviewing significant quality investigations. Its goal is to cultivate an overall reduction in risk.

A CAB reviews:

• key aspects of the investigation to ensure that key quality milestones are met;
• the corrective actions suggested by the investigation team;
• systemic causes uncovered by the investigation. Based on reviews, the CAB:
  • suggests improvements given to the investigation team;
  • approves of corrective actions;
  • communicates systemic opportunities for improvement to other parts of the organization. This model could be equally effective in the area of safety.
SRB Review Process Key Elements
Assessing Investigation Quality When a CAB reviews an investigation for quality, it must incorporate a standard score sheet and provide space to add qualitative comments for each section. The score sheet fosters consistency and completeness. Every investigation should include a problem statement, causal analysis, report summary, corrective action plan, identification of systemic causes and remaining actions. Problem Statement A complete problem statement explains the problem, when and where it happened, and its effect on the organization. If the investigation was triggered by a predefined threshold exceedance, the report should note this. An example of a safety threshold exceedance used by many companies is an OSHA-recordable injury. The SRB should consider predefined thresholds. Are they working as intended? Are they too low or too high given the investigative resources allocated by the company? Should thresholds or investigative resources be adjusted? These are important program considerations into which the SRB has visibility. SRB input can be crucial to effectively balancing the expectations placed on the safety program with the resources allocated toward achieving these expectations.

Causal Analysis
The SRB should review the causal analysis because this is the basis for the team's conclusions. There are many methodologies for causal analysis; some are better than others. The organization should also select a single methodology and stick to it so that everyone conducting investigations follows the same process and generating reports that are accurate and consistent. Any root-cause analysis (RCA) provider either has, or will be willing to help a site develop a list of key elements to include in the review.

Report Summary
The summary statement is essentially the causal analysis converted into narrative form. Is the report summary complete and thorough? Is it accurate? Is it readable? When the report is distributed, this is likely where most readers will get their information. A well-written summary statement is crucial to accurate dissemination of this information. Report writing is not everyone's specialty. Consider designating an internal resource to edit widely distributed reports.

Corrective Action Plan
Corrective actions derive from causes. The SRB needs to ensure that the corrective actions recommended by the team are supported by the analysis. The SRB also needs to practice basic portfolio management with respect to corrective actions. The best corrective action plans include a multipronged attack on causes rather than just a single root cause. The SRB should consider the overall risk reduction offered by the combination of corrective actions. The SRB also needs to review the actual implementation plan. Has the team completed a plan that is achievable in a reasonable time frame? What barriers might prevent implementation that the
SRB can help overcome? Has the team considered important management-of-change issues to help ensure that its recommended solutions do not cause other problems?

**Systemic Opportunities**
Areas of systemic organizational risk often can be found in any analysis. Examples of systemic problems include a high turnover rate, a bias toward production and a reactive maintenance program. Such high-level causes increase the risk of incidents to everyone in the organization. The SRB is uniquely suited to identify these causes and help elevate their visibility in the organization to a level that can make a difference.

**Remaining Actions**
Most investigations have outstanding action items to be completed. The SRB should review these outstanding items to ensure that all loose ends are tied up in a timely fashion. The score sheet only tells part of the story. Ensure that SRB members have the ability to comment qualitatively as well.

**CAB Pitfalls**
CABs are planned with the best intentions, but implementation can present some pitfalls. Those pitfalls include selecting the wrong people as CAB members, failing to take return on investment into account, being unable to overcome a quick-fix culture and deficiencies in RCA program implementation.

**Optimal Membership**
Those chosen as CAB/SRB members should have both the ability and the incentive to participate effectively. Effective participation requires that the SRB member have a solid knowledge of the RCA process, as well as the supporting problem management program. All members need to know the steps involved in an RCA. They need not be card-carrying RCA facilitators, but such knowledge certainly does not hurt. This experience provides them with the ability to understand what is being presented as well as how the information was generated. This allows the SRB team to provide credible, meaningful feedback and mentorship to the RCA facilitator. Participating effectively also requires a certain level of power within the organization. CAB/SRB members need to set priorities and assign resources. This power could be inherent in the CAB or SRB member’s title, or could be bestowed from executives for the purposes of the CAB/SRB. CAB/SRB members also need to have the incentive to participate. They must have a stake in the successful outcome of the investigation and of the problem management program itself. They need to see how the program not only aligns with the metrics by which they themselves are measured at their performance reviews, but also how it is actually a critical component of their job function. Their goals and the goals of the problem management program are one and the same.
Quantifying Return on Investment
Many safety programs do not take return on investment (ROI) into account. This mistake is often made with the best intentions; no company wants to be perceived as acting on safety-related problems only when it experiences a certain financial outcome. This is understandable, but there are good reasons to take into account the financial impact of safety problems, not to mention the nonfinancial ROI calculations. ROI is an important way to keep score for the program. If done properly, it can show the program’s value in both qualitative and quantitative terms. It helps to involve finance in this calculation. Many safety professionals may not know how to build an ROI model that is accurate and meaningful. The finance department should be able to help.

Quick-Fix Culture
Often, the focus of an RCA program is incident management versus problem management. The purpose of incident management is to get business back up and running as soon as possible. However, when the focus is solely on getting back to work, the process overlooks important systemic risk factors that will leave the organization at risk for recurrences. The SRB should be tuned for problem management, which brings more thorough RCA into the issue. The SRB can help shock a quick-fix culture into taking a more long-term approach to significant problems, but it also can reinforce the quick-fix culture.

Program Implementation Problems
Many RCA programs have gaps that can lead to an ineffective SRB process. These include:

- failure to define program goals and objectives;
- failure to define appropriate threshold criteria;
- training the wrong people as investigators;
- not implementing recommended corrective actions;
- failure to develop effective program metrics.

A well-planned SRB is only one element of a successful problem management program. The other pillars listed also must be in place in order to achieve optimal results.
Building an Effective SRB
A Quick Checklist

1. Choose the right SRB members.
   - Members should be knowledgeable in the company's RCA process.
   - Members should possess organizational power.
   - Members should have a personal incentive for the success of the SRB.

2. Develop a consistent review process.
   - Use a score sheet.
   - Comment qualitatively.
   - Provide constructive feedback.
   - Reward high-quality work publicly.

3. Root out systemic risk.
   - Learn to recognize systemic problems/causes.
   - Make sure to communicate with other parts of the organization.

4. Ensure that action items are completed.
   - Verify that all actions are on track.
   - Validate that actions did in fact reduce the risk of recurrence.

Brian Hughes is vice president of Sologic, a provider of root-cause analysis consulting, training and software, an affiliate of Artemis Investigations. Hughes has led significant incident investigations, including those related to major explosions, chemical releases, consumer product contamination, manufacturing defects and supply chain processes. For more information, visit www.sologic.com or contact Hughes at brian.hughes@sologic.com; (989) 835-3402.