

Accident Investigations and Root Cause Analysis

Despite our best efforts to keep our workplaces as safe as possible, accidents do happen. As a supervisor, one of your many responsibilities is to follow up on accidents once they've occurred and perform an accident investigation. The purpose of an accident investigation is to prevent the recurrence of the event. The focus should be on the accident, not the injury. Unfortunately, too often the investigation process is limited to completing the report with an account of "what happened" rather than asking "why did it happen?"

For an accident investigation to be effective, it needs to be structured, systematic, and performed by employees who can maintain an open mind about the causes of an accident throughout the investigation. The paradox is that most supervisors don't have the basic tools or training needed to conduct an effective accident investigation. This is why basic "root cause" accident investigation training is an important component in your district's safety culture.

Root causes are failures of the system, not of individuals. Most accidents in an organization are caused by system failures or operational errors, but all too often the "system" looks for somebody to blame. Blaming individuals seldom prevents reoccurrence because it changes nothing about the system underlying the incident. Through root cause analysis, investigators examine the cause and effect chain of events that led to the accident. Working backwards in the system, starting from the incident, all possible contributing causes are considered— the environment, the task, procedures, material (equipment), and human behavior (employee and management). In most cases, you will find that accidents are caused by multiple underlying and interconnecting causes, each of which must be identified and corrected in order to prevent a recurrence. Once all possible causes are identified, each one is examined by studying the cause and effect chain until the *root* cause is identified. This is accomplished through a simple questioning process. For example, it is not enough to learn that an injury occurred because an employee didn't follow a particular procedure. It is critical to find out *why* he chose not to follow it. Was he in a hurry? If so, *why* was he in a hurry? Was there a time constraint? Was there a shortage of personnel? Was there a communication breakdown with the supervisor? Was the employee properly trained? Was the necessary protective equipment available? You will get honest answers to these questions only if management has reduced employee fear of repercussion and developed an atmosphere of trust in the organization. Employees must know that the goal of accident investigation is prevention, not blame. Through this questioning process, you can discover aspects of the system that, when improved, can accomplish this.

