INJURY & NEAR MISSES INVESTIGATION BEST PRACTICES

The science of investigating and analyzing occupational injuries is evolving. This bulletin will provide insights into the latest findings by researchers such as Sydney Dekker, E. Scott Geller, Ph.D., and Timothy D. Ludwig, Ph.D.

The overriding principle in the new investigative process is to understand that the employee made a decision or acted in a manner that they believed would successfully complete the assigned task. This requires the injury investigation team to not just identify the action that led to the injury, but also the reason behind the action. This also moves the investigation from blame towards learning. Further, the Injury Investigation Team must recognize that the organization created the knowledge, skill, or attitude (K-S-A) gap in the employee. This is referred to as the 'System Approach' to injury investigation.

The System Approach recognizes that the organization's hiring system, training and retraining system, equipment selection system, intrinsic and extrinsic reward and consequence system, supervision system, and more, created the K-S-A gap in the employee that led to the injury. The System Approach seeks to identify and correct the deficiencies in the organization's systems to prevent recurrence of the injury. The organization is essentially investigating itself.

An injury investigation starts with someone collecting information about the circumstances of the injury. There are three obstacles that must be overcome:

1. The history of injury investigation is the first culprit. Historically, the safety profession has encouraged employers to identify the Root Cause of the injury. Root Cause is the most proximal event that led to the injury. This automatically resulted in attributing the injury to a person who did or didn't do something. BLAME. Blaming the injured worker or a coworker for the injury shuts down employees from giving full accounts of the circumstances of the injury. Lack of information will lead to a flawed investigation. The organization must overcome the self-inflicted wound of past investigations.

2. An additional obstacle is that the person collecting the information may have natural human biases and assumptions. Biases must be consciously put aside, and the interviewer must consciously frame questions without any hint of judgment. If the person being questioned feels that the questioner has already reached a conclusion or is trying to blame them for the incident, they will withhold information. Without information, there can be no learning as to why the injury occurred.

3. It is human nature for the person being questioned to assume the questioner has ill intentions. There's a name for it: Hostile Attribution Bias. People are notoriously bad at guessing the intentions of others. They assign overly negative intentions to others and assert overly generous intentions in themselves. The result is that the person feels blamed by the questioner, while the questioner feels their questions are entirely well-intentioned.

4. Fortunately, most public employers do not experience many injuries, so injury investigators are not experienced in collecting sufficient information.

MSI provides several resources to enhance an investigation:

- MSI Forms and Documents
  - Accident Action Plan Worksheet
  - Contributing Factors Analysis Worksheet
  - Lifting Carrying Injury Investigation Worksheet
  - Primary Injury Acute Illness Investigation Worksheet
  - Slip & Trip Injuries Investigation Worksheet
  - Supervisor Incident Investigation Report

- MSI Model Policies
  - Accident & Near Misses Investigation Model Policy

- MSI LIVE Schedule
  - **Accident Investigation:** This course leads the student through the 3-Step Process of 1)collecting good information of the incident, 2) identifying the root cause and contributing factors, and 3) creating an action plan to incorporate what was learned from the investigation.

There is no easy answer to this. The solution is to establish a layer of mutual trust between the parties long before questioning begins.

Once the facts have been collected, they must be assembled into a comprehensive picture of each participant's timeline, behaviors, and decisions. Creating a frank assessment requires overcoming two more natural biases.

Hindsight Bias is the tendency, upon knowing the outcome of an event, to overestimate one's ability to foresee the outcome. In a practical sense, after the injury, it will seem obvious to the investigator that an injury would result from the decision or action after the injury. To the person taking the action, it was not obvious that an injury would result. In fact, they fully anticipated NOT having an injury.

Confirmation Bias is the tendency to process information by looking for, or interpreting, only information that is consistent with one's existing beliefs and discounting evidence or facts that do not support one's conclusion. Hindsight and Confirmation Biases can blind the organization to its own contributions to the injury and to focus only on the employee's contributions.

Every investigation should conclude with an action plan to address one or more of the contributing factors that led to the injury. An action plan does not tell the employee to be more careful. The action plan would address the process, procedures, training, or other inputs that answer the question, "Why did they act that way?" Here's a tip: if you can understand why the action or decision made sense to the person at the time, you can address the mismatch between their anticipated positive outcome and the outcome (injury) that resulted. Remember where we started, assuming that the person made a reasonable decision with the information they had at the time. The action plan will most likely have to address one or more of the decision or action's inputs, not the decision or action itself.

On the MSI Fire & EMS Injury Investigation are three videos illustrating injury investigations to emergency responders and examples of effective action plans. While they are fire- and EMS-based, the process can easily be transferred to any department and any injury.