

October 2008

**Why are incidents investigated?**

- To prevent a similar incident by identifying ways to improve practices and procedures
- To document the facts surrounding the occurrence of an incident
- To determine the direct causes of the incident
- To discover indirect causes of the incident

**What incidents should be investigated?**

- All incidents that result in the death of an employee, contractor, visitor or member of the public
- Accidental exposures to chemical, biological and radiological hazards
- All incidents that result in injuries requiring medical attention
- All incidents that result in injuries requiring first aid
- All incidents that result in property damage
- All incidents that just miss causing an injury or property damage—a “near miss”
- All illnesses attributed to work-related exposures, once the causes are known

**Reasons for Reporting all “Near Misses”**

- Investigating the cause of a “near miss” might lead to preventing a future incident that could result in a serious injury, property damage, or both
- Co-workers will be alerted to hazards they might not have been aware of
- Your company can take corrective actions to eliminate the cause of a “near miss”

# Risk Services Notes

## Incident Investigation

Accidents are a part of a group of events that adversely affect the completion of a task. All of the events in this group are incidents. Those that do not result in injury and/or property damage are sometimes called “near misses,” but they represent significant warnings of potential accidents.

Incident investigation is an essential step toward making changes that can prevent the recurrence of accidents from similar causes. If anything positive results from an accident, it is the opportunity to determine the causes and how to eliminate them. Thorough incident investigation can identify hazardous activities and conditions within an organization.

Incident investigation involves more than merely filling out forms. Well-managed organizations insist on quality incident investigations, just as they insist on efficient, quality production. Part of the performance evaluation for a supervisor or team leader may be based on how well an incident investigation is handled.

A good incident investigation program is based on an effective, thorough incident notification plan. Many organizations make the mistake of requiring notification and investigation of only “serious” accidents. All incidents should be reported as soon as possible—whether they did or could have resulted in personal injuries, illnesses or property damage. For example, a tool falling off a platform that is missing toe-boards might not hurt anyone. However, it just as easily could have fallen on someone’s head, inflicting a serious injury. Regardless of the outcome, this kind of incident should be reported, the cause investigated and corrective action taken to prevent recurrence. When the causes are removed, accidents can be prevented. To help establish an effective incident reporting system, make sure training on this subject is covered in your organization’s new employee orientation program.

The purpose of an incident investigation is to determine causes and recommend corrective actions to eliminate or control these hazards. Incident investigation should be aimed at fact-finding rather than fault-finding—otherwise, the investigation can do more harm than good. The emphasis should be on identifying all possible causes, not on who could be blamed for the incident. An attempt to place blame damages the investigator’s credibility and generally reduces the amount and accuracy of information received from workers. This does not mean oversights or mistakes should be ignored, nor that personal

responsibility should not be determined, when appropriate. It means that the investigation should be concerned only with the facts.

To do a quality job of investigating incidents, the investigator must be objective and analytical. There are many factors that combine to cause accidents. The theory of multiple causation states that it is the random combination of various factors that results in accidents.

A report must do more than just identify unsafe acts or hazardous conditions surrounding an incident. These may be only contributing causes but not the root causes of a specific incident. For example, an incident report might state that the incident was caused by an oily patch on the floor. Instead of merely noting there was oil on the floor, the supervisor must determine how and why the oil got there. If there was an equipment lubrication leak, had the condition been previously reported? If poor maintenance was the cause, had that been reported? If so, when? If not, why not? These are the kinds of questions that must be asked and answered (i.e., who, what, where, when, how and why).

Generally, the procedures followed during an investigation are designed to elicit clues to other problems. Inadequate maintenance, poorly designed equipment, untrained employees and lack of policy enforcement or standard procedures (management control) are all causative factors.

The safety and health of employees and visitors must be the primary concern when an incident occurs. If an injury or illness results, make sure the affected persons get immediate medical attention and take steps to provide for emergency rescue or evacuation, as necessary. In addition, take any actions that will prevent or minimize the probability of further incidents happening as a result of the initial incident.

An organization should set up a plan for responding to incidents. The plan should specify what should be done in case of an incident, list names and phone numbers of people to call and assign specific responsibilities to all persons involved in the emergency response plan.

Please see the attached “Practical Tips” for conducting an incident investigation provided by the National Safety Council.



# Practical Tips

## CONDUCTING AN INCIDENT INVESTIGATION

How should an investigation proceed? When conducting an investigation at your facility, it is important to be thorough and logical to capture all related data about the incident. Review the 10 steps outlined in the following paragraphs. You may include other steps to meet the unique needs and characteristics of your business.

Step	Explanation
<b>1. Provide Emergency Response</b>	<ul style="list-style-type: none"><li>• Notify 911, medical, fire, rescue as appropriate.</li><li>• Make sure that a timely first-aid response is available to injured employees.</li><li>• If off-site medical treatment is required, ensure that an employee accompanies those who might not be able to take care of themselves.</li></ul>
<b>2. Secure the Area</b>	<ul style="list-style-type: none"><li>• Get the big picture.</li><li>• Isolate the incident scene (rope, tape, guard, etc.).</li><li>• Lock out any machine that might have been involved.</li><li>• Do whatever it takes to prevent another occurrence while preserving all evidence for the investigation.</li></ul>
<b>3. Identify Potential Witnesses</b>	<ul style="list-style-type: none"><li>• Make a list of everyone who was involved in or might have witnessed the event.</li><li>• Look for all types of witnesses:<ul style="list-style-type: none"><li>○ Eye/ear witnesses</li><li>○ Others who might have any useful, factual information</li></ul></li></ul>
<b>4. Have the Necessary Investigative Tools Available</b>	<p>A pre-assembled kit might include:</p> <ul style="list-style-type: none"><li>• Camera and Film</li><li>• Video Camcorder</li><li>• Tape Recorder</li><li>• Measuring Devices</li><li>• Sample Containers</li><li>• Interview and Investigation Forms</li></ul>



# Practical Tips

<b>4. cont.</b>	<ul style="list-style-type: none"><li>• Flashlight</li><li>• Barricade Markers</li><li>• Tape</li><li>• Tags</li><li>• Padlocks</li></ul>
<b>5. Procure Hard Evidence and Record Data</b>	<ul style="list-style-type: none"><li>• Collect, tag, record, and/or photograph all evidence that can or may be used for your investigation, such as materials, machine parts, tools, and equipment.</li><li>• Use appropriate forms, such as investigation reports.</li><li>• Work cooperatively with the supervisor and safety, health, and medical personnel in preparing necessary reports and records.</li></ul>
<b>6. Conduct Interviews</b>	<ul style="list-style-type: none"><li>• Ask interviewees to provide as much clear and specific information as possible.</li><li>• Ask open-ended questions.</li><li>• Avoid bias.</li></ul>
<b>7. Review Data</b>	<ul style="list-style-type: none"><li>• Look at inspection reports, maintenance reports, prior incident reports, and analysis.</li><li>• Identify patterns or trends.</li><li>• Analyze all data for completeness/accuracy.</li></ul>
<b>8. Prepare Incident Report(s)</b>	<ul style="list-style-type: none"><li>• Record key facts.</li><li>• Prepare the written report carefully.</li><li>• Share summaries of vital information with managers/supervisors and employees.</li><li>• Keep everyone informed.</li></ul>
<b>9. Conduct Causal Factor Analysis and Determine Corrective Action</b>	<ul style="list-style-type: none"><li>• Analyze facts.</li><li>• Determine root causes.</li><li>• Determine and implement corrective actions to eliminate root causes.</li></ul>



# Practical Tips

## 10. Follow Up

- Follow up to ensure corrective actions that are decided upon are implemented by rules established for such action.
- Check on their accuracy and effectiveness during follow-up.
- Talk to people involved to ensure that necessary training was received and that the corrective actions work. Ask:
  - Are similar incidents still occurring?
  - What is the quality of supervision?
  - Are employees able to take individual action?