



# Risk Control Technical Guide

Another Risk Control Service from the member companies of The PMA Insurance Group

## ACCIDENT INVESTIGATION

### Background

Accident investigation and analysis is an essential element of any loss control program. A systematic study of mistakes will often help to avoid repeating them. This report addresses the purpose of accident investigation and briefly reviews techniques of investigation and analysis of accidents. By studying accidents that have occurred, we can identify their causes, take action to eliminate identified causes and, thus, prevent future accidents.

A properly planned, implemented and controlled accident investigation program can reduce the cost of accidents to your organization and prevent recurrence. Aggressive, thorough reviews of accident causes and the development of effective corrective measures will help to prevent future accidents.

### Definitions

Accident - an unplanned event that may or may not result in personal injury, property damage, or both.

Incident - an unplanned event that, under slightly different circumstances, could have resulted in personal injury, property damage, or both.

The term "incident" is sometimes used interchangeably with "accident". For loss prevention and control purposes, an incident should be treated the same as an accident - investigated and analyzed.

### *Who should complete the investigation?*

The immediate supervisor is usually responsible for completing the investigation but upper management must also take an active role. Management must ensure that the following elements are in place:

- √ An accident investigation and reporting system, including forms and procedures and a defined policy statement.
- √ Assigned responsibilities for carrying out the program (usually for supervisors).
- √ Training for those responsible (supervisors) for completing accident investigations in the techniques of investigation and reporting.
- √ Hold those who are responsible for completing accident investigations accountable for their performance. Specific accountability criteria must be established, communicated to the supervisors and enforced.

Supervisors must accept their responsibility. They are in the most effective position to determine the facts surrounding each incident, ascertain both the obvious and the "root causes", and develop solutions. Their familiarity with the processes and personnel will permit the development of effective control measures that can be implemented.

### *When should the investigation be completed?*

All investigations should be completed as soon as possible after the incident has occurred to determine the cause(s) and develop corrective action. It is important to gather the facts while the incident is still fresh in the minds of those involved. An incident that results in only a minor injury or a "near-miss" today may result in a serious or fatal injury in the future.

Procedures and reporting systems should be developed and communicated to all affected employees. The safety director, designated safety representative or safety committee may be responsible for reviewing each supervisory investigation report and resolving unanswered questions. The safety director, designated safety representative or safety committee may report to management on recurring accidents, details on specific serious accidents, and plans for corrective action.

Once the procedures are established, the personnel involved must be informed of their responsibilities in the investigation of accidents and an accountability system implemented. The personnel involved must be properly trained in the techniques of accident investigation.

### ***How to complete an accident investigation?***

The first step in any accident involving an injury is to secure medical treatment for the injured person and/or secure the scene in order to prevent additional injuries or property damage. Once this is accomplished, the investigation should begin as soon as feasible. Interviews with the injured/involved party and any witnesses should be completed to determine the facts. Records should be made of all pertinent facts. Photos and diagrams may be useful to supplement the written description.

Perhaps the best method of completing an accident investigation is make sure that you ask questions that will reveal the WHO-WHAT-WHY-WHEN-WHERE and HOW aspects of the accident. Answering these questions will help in determining the facts surrounding the accident.

Once all the facts of the accident have been defined, investigation of the causes can begin. The obvious causes of the loss should be determined first and then the underlying causes defined. For example, consider an accident where an employee injures a hand in an unguarded punch press. Investigation reveals that the guard was removed. The obvious conclusion is that the lack of the guard caused the injury and replacing the guard will prevent future injuries.

There are, however, additional factors to be considered in investigating this accident. Answering the following questions may yield additional, vital information:

- § Why was the guard removed? (Isn't it important to know who removed the guard?)
- § Is the equipment and guarding consistent with current state-of-the-art? Has it been properly maintained?
- § Is the guard interlocked?
- § Is the most effective and efficient method of guarding being used? Have alternative methods been evaluated?
- § Has a job hazard analysis been completed on this job? Was it properly completed and is it being used for training?
- § Was the employee properly trained to operate this machine?
- § Has the supervisor been trained?
- § Has the supervisor been held accountable for his or her safety performance?

Once the problems have been properly identified, corrective action should be taken. Various alternatives should be evaluated. In many situations, the most effective corrective action cannot be implemented immediately. Temporary measures should be put in place while the more-involved alternatives are studied. Actions requiring large capital expenditures, in particular, may require months or years to implement. Personnel should not restrict themselves to measures that can be completed quickly and easily. If permanent, more effective measures are feasible, management should be made aware of the action needed so that long-range plans can be made.

Management should control the accident investigation process by reviewing selected reports completed by the supervisors. The effectiveness of the completed investigations and the status of corrective actions taken should be monitored by management.

### ***Accident investigation Reporting Forms***

Accident investigation reporting forms should be developed to simplify the gathering of pertinent facts and standardize the reporting of completed investigations. The reporting form should include all information that is pertinent to your operation, including:

- § Time and place of the accident/incident.
- § Person(s) injured.
- § Occupation, work experience.
- § Type of work being performed.
- § Severity of the injury (medical only, lost work time, etc.)
- § Type of injury (fall, struck against, etc.)
- § Nature of the injury. (Abrasion, overexertion, etc.)

- § Part of the body injured. (Hand, foot, etc.)
- § Object, substance, equipment or motion that caused the accident/incident.
- § Hazardous conditions and/or at risk behaviors that caused the accident/incident
- § Factors contributing to the accident/incident (such as a lack of training).
- § Action taken to prevent re-occurrence of a similar accident.
- § Follow-up to ensure corrective action was satisfactorily implemented.

The report form should also include a provision for describing the corrective measures taken or planned to prevent a recurrence. A properly designed investigation report can also provide the information necessary to report claims to the insurance carrier. The accident investigation form is not intended as a substitute for state-mandated Worker's Compensation First Report of Injury or other required forms.

The following pages contain a sample accident investigation form that you can use or customize to meet your specific needs. PMA can also provide training for your supervisors in how to complete an accident investigation. If you have any questions or would like additional information, contact your local PMA Risk Control consultant.

**IMPORTANT NOTICE - The information and suggestions presented by The PMA Insurance Group in this Risk Control Technical Guide are for your consideration in your loss prevention efforts. They are not intended to be complete or definitive in identifying all hazards associated with your business, preventing workplace accidents, or complying with any safety related, or other, laws or regulations. You are encouraged to alter them to fit the specific hazards of your business and to have your legal counsel review all of your plans and company policies.**

# Supervisor's Accident Investigation Report (Front)

## Note to Supervisor

Remember that an accident investigation is not designed to find fault or blame. Rather, it is a tool to find causes that can be controlled or eliminated

## Completing the Investigation

Try to answer these questions:

- ü Who was injured?
- ü What materials, equipment, machines or other conditions were involved?
- ü Why did the accident happen?
- ü When did the accident happen?
- ü Where did it happen?
- ü How did the accident occur?

## Make Recommendations

No accident investigation is complete unless corrective action is suggested and implemented.

## Follow-up

Determine and document what action has been taken on your recommendations

Date: \_\_\_\_\_  
 Employee/Property Involved: \_\_\_\_\_  
 Position: \_\_\_\_\_ Date Employed: \_\_\_\_\_  
 Supervisor: \_\_\_\_\_ Department: \_\_\_\_\_

How long was employee performing this operation?  
 Was the employee instructed?  Yes  No  
 Did the accident result in an injury?  Yes  No

**Severity of Injury:** OSHA Recordable?  Yes  No  
 First-aid only  Medical treatment only  Near miss  
 Fatality  Lost workday (away from work)  Restricted duty (work or motion)

Date lost time began: \_\_\_\_\_ Date restricted time began: \_\_\_\_\_

**Type of Injury:**  
 Fall from elevation  Caught in, under or between  Contact w/ Temp. Extremes  Other  
 Fall on same level  Rubbed or abraded  Contact w/ other  Unknown  
 Struck against  Bodily reaction  Public transportation accident  
 Struck by  Overexertion  Motor vehicle accident  
 Puncture  Contact w/ electrical current  Slip

**Nature of Injury:**  
 Abrasion  Contusion  Fracture  Puncture  Sprain  Illness/Infection  
 Amputation  Crushed  Inhalation  Rash  Skin contact  Prop. Damage  
 Burn  Foreign Body  Laceration  Strain  Rep. Motion  Other (describe)

**Body Part Injured:**  
 Arm  Face  Groin  Internal Organs  Neck  Wrist  
 Back  Finger  Hand  Leg  Torso  Other (describe)  
 Eye  Foot/feet  Head  Multiple  Trunk

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Date of accident: \_\_\_\_\_ Time of accident: \_\_\_\_\_  
 Date reported to supervisor: \_\_\_\_\_  
 How did accident occur? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Cause of accident: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Witnesses Name	Dept./Address	Phone Number
_____	_____	_____
_____	_____	_____

Recommendations to prevent a recurrence: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Time: \_\_\_\_\_

What action has been taken/planned to date? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_ Dept: \_\_\_\_\_ Date: \_\_\_\_\_

Safety Committee Comments

Endorses actions indicated above

Make new or additional recommendations

Recommendations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Executive

Special Orders: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_ Dept: \_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Diagram or Photo: