



How to Conduct an Incident Investigation

Your company has just experienced an incident resulting in an unintentional injury to a worker. Now what? Reacting quickly to the incident with a prescribed procedure and actions can demonstrate your company's commitment to safety and ensure the proper information is collected to fulfill an incident investigation's ultimate purpose – to prevent future incidents.

Steps in an Investigation Process



The investigation process should begin after arranging for first aid or medical treatment for the injured person(s). In getting started, remind everyone involved—especially workers—the investigation is to learn and prevent, not find fault. Steps of the investigation process include:

- 1. Call or gather the necessary person(s) to conduct the investigation and obtain the investigation kit.
- 2. Secure the area where the injury occurred and preserve the work area as it is.
- 3. Identify and gather witnesses to the injury event.
- 4. Interview the involved worker.
- 5. Interview all witnesses.
- 6. Document the scene of the injury through photos or videos.
- 7. Complete the investigation report, including determination of what caused the incident and what corrective actions will prevent recurrences.
- 8. Use results to improve the injury and illness prevention program to better identify and control hazards before they result in incidents.
- 9. Ensure follow-up on completion of corrective actions.

What to Include in the Documented Investigation Process

As with many processes, preparation and documentation are crucial. As part of the injury and illness prevention program, the investigation procedure should detail:

- Who should conduct and participate in the investigation
- Incidents to be investigated
- Information to be collected
- Identification of causal factors (often referred to as root causes)
- Determination of corrective actions
- Tracking completion of corrective actions

Who is involved - Normally, the investigation is conducted by the injured worker's immediate supervisor. However, assistance can also be provided by the safety practitioner, or team members from an investigative or review committee or safety committee if such teams exist. In cases involving a fatality, senior management personnel, engineering staff or legal counsel may also be involved. Those participating in the investigation would include the injured worker, witnesses to the incident or events preceding it, and the injured worker's immediate supervisor if some other person is conducting the investigation. The injured employee may also request the presence of an employee representative during the interview if contractual agreements are in place.

What gets investigated - Any incident resulting in a fatality or serious injury should be thoroughly investigated. To obtain the best possible data to aid in predicting and preventing future incidents, it is also recommended that all recordable, first aid and near miss/close call incidents be investigated.

Information to collect - The type of information that should be collected during the investigation process includes:

- Worker characteristics (age, gender, department, job title, experience level, tenure in company and job, training records, and whether they are full-time, part-time, seasonal, temporary or contract)
- Injury characteristics (describe the injury or illness, part(s) of body affected and degree of severity)
- Narrative description and sequencing of events (location of incident; complete sequence of events leading up to the injury or near miss; objects or substances involved in event; conditions such as temperature, light, noise, weather; how injury occurred; whether preventive measure had been in place; what happened after injury or near miss occurred)
- Characteristics of equipment associated with incident (type, brand, size, distinguishing features, condition, specific part involved)
- Characteristics of the task being performed when incident occurred (general task, specific activity, posture and location of injured worker, working alone or with others)
- Time factors (time of day, hour in injured worker's shift, type of shift, phase of worker's day such as performing work, break time, mealtime, overtime, or entering/leaving facility)
- Supervision information (at time of incident whether injured worker was being supervised directly, indirectly, or not at all and whether supervision was feasible)
- Causal factors (specific events and conditions contributing to the incident)
- Corrective actions (immediate measures taken, interim or long-term actions necessary)

What to have on hand - To be prepared to complete an investigation promptly following an incident, it is best to have prepared a kit ahead of time that includes:

- Investigation forms
- Interview forms

- Barricade markers/tape
- Warning tags or padlocks
- Camera or video recorder

- Voice recorder
- Measuring tape
- Flashlight
- Sample containers





Interviewing people - Interviewing injured workers and witnesses necessitates reducing their possible fear and anxiety, and developing a good rapport. Interviews should follow these steps:

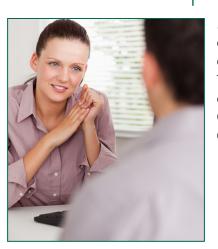
- 1. State the purpose of the investigation and interview is to do fact-finding, not fault-finding.
- 2. Ask the individual to recount their version of what happened without interrupting. Take notes or record their response.
- 3. Ask clarifying questions to fill in missing information.

- 4. Reflect back to the interviewee the factual information obtained. Correct any inconsistencies.
- 5. Ask the individual what they think could have prevented the incident, focusing on the conditions and events preceding the injury.

Determining causal factors – The purpose of all this fact-finding is to determine all the contributing factors to why the incident occurred. Statements such as "worker was careless" or "employee did not follow safety procedures" don't get at the root cause of the incident. To avoid these incomplete and misleading conclusions in your investigative process, continue to ask "Why?" as in "Why did the employee not follow safety procedures?" Contributing factors may involve equipment, environment, people and management. Questions that help reveal these may include:

- 1. Was a hazardous condition a contributing factor? (defects in equipment/tools/materials, condition recognized, equipment inspections, correct equipment used or available, substitute equipment used, design or quality of equipment)
- 2. Was the location of equipment/materials/worker(s) a contributing factor? (employee supposed to be there, sufficient workspace, environmental conditions)
- 3. Was the job procedure a contributing factor? (written or known procedures, ability to perform the job, difficult tasks within the job, anything encouraging deviation from job procedures such as incentives or speed of completion)
- 4. Was lack of personal protective equipment or emergency equipment a contributing factor? (PPE specified for job/task, adequacy of PPE, whether PPE used at all or correctly, emergency equipment specified, available, properly used, function as intended)
- 5. Was a management system defect a contributing factor? (failure of supervisor to detect or report hazardous condition or deviation from job procedure, supervisor accountability understood, supervisor or worker adequately trained, failure to initiate corrective action)

Completing report and documenting corrective actions - At this point, once you've gathered information and interviewed the involved worker and any witnesses, you can prepare the investigation report itself and formulate corrective actions. Your company should have determined who the report is sent to, within what time frame and what information gets communicated to workers, management, or gets filed or posted. Each corrective action listed should have a person assigned ultimate responsibility for the action, a completion date set and a place to mark completion of the item.



Incident Investigation Process Diagram

Determine:

- Who conducts and participates in investigation
- What incidents to investigate
- What information to collect
- Prepare investigation kit

Prepare

- Create investigation and interview forms
- Document investigation procedures
- Select and train investigators

- Arrange for first aid or medical treatment of injured person(s)
- Secure the scene
- Identify and gather witnesses
- Retrieve investigation kit

Review documentation

using the "Why" method

Identify causal factors (root causes)

Enact

Incident

- Interview injured worker and witnesses
- Document scene with photos or videos
- Collect information

Analyze

- Determine corrective actions
- Prepare report
- Communicate report

Correct

- Implement corrective actions
- Track completion of corrective actions

- Share information with others
- Critique process for continuous improvement

Through the OSHA and National Safety Council Alliance, NSC developed this fact sheet for information purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. December 2014

Under the Occupational Safety and Health Act, employers are responsible for providing a safe and healthy workplace and workers have rights. OSHA can help answer questions or concerns from employers and workers. OSHA's On-site Consultation Program offers free and confidential advice to small and medium-sized businesses, with priority given to high-hazard worksites. For more information, contact your regional or area OSHA office, call 1-800-321-OSHA (6742), or visit www.osha.gov.

Nearly 11 workers die on the job each day and 5 million are injured in the U.S. annually. The National Safety Council has launched the Journey to Safety Excellence®

Campaign, with national sponsor Grainger, to help keep your workers safe. The Journey provides you with free tools and resources to make workplaces of any size or industry safer. For more information and to become a part of a growing online community of safety practitioners, visit nsc.org/journey and join today!