

ILLINOIS INSTITUTE OF TECHNOLOGY SAFETY POLICY COMMITTEE

INCIDENT INVESTIGATION POLICY AND INVESTIGATION FORM

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I. Introduction

Generally, incidents occur when hazards escape detection during the implementation of preventive reviews and measures, such as a job or process safety analysis when the hazard is not obvious or is the result of a combination of circumstances that were difficult to foresee. A thorough post-accident investigation is important as it may identify previously overlooked physical, environmental or process hazards, the need for new or more extensive safety training or unsafe work practices. The primary focus of any incident investigation should be to determine the facts surrounding the incident and the lessons that can be learned to prevent future similar occurrences. The focus of an investigation should not be to assign blame. Instead, the process should be viewed as an opportunity for safety improvement and prevention enhancement; thus, the objective of the investigation should be to identify the root causes of the accident.

II. Scope and Application

The purpose of this Policy is to provide general guidance to those who conduct investigations and to standardize reporting. An investigation should be undertaken in accordance with this Policy if the accident concerned a subject covered by IIT's Safety Policies & Procedures (which policies and procedures are posted at <https://web.iit.edu/general-counsel/resources/safety-committee-reports>) and involved:

1. an actual injury,
2. the potential for serious injury, or
3. property and/or product damage.

An investigation hereunder is in addition to any investigation undertaken by the Department of Public Safety. Though the Director of Environmental Health and Safety (the "Director") has the ultimate authority to investigate all accidents, he or she may designate the applicable Designated Safety Officer ("DSO") in conjunction with the Faculty Safety Coordinator ("FSC") to conduct the initial investigation of accidents occurring in laboratories or research facilities on his or her behalf. The relevant Chair or Director will be included in the investigation as needed or appropriate. All other incidents will be investigated by the Director in conjunction with the relevant department head, as needed or appropriate. The depth and complexity of the investigation should be consistent with the circumstances and seriousness of the incident and should result in appropriate corrective action.

III. Program

The first priority whenever an incident occurs is to deal with the emergency and ensure that any injuries or illnesses receive prompt medical attention. The incident investigation should begin immediately thereafter. This ensures that details of what occurred will be fresh in people's minds and that witnesses don't unintentionally influence one another by talking about the incident. It also minimizes the likelihood that important evidence will be mistakenly moved, taken, destroyed or thrown away before the scene has been thoroughly inspected.

A. Types of Incidents

Often incidents will be classified as serious or non-serious. Non-serious incidents do not cause lost workdays or significant physical injury or property damage, even though the worst that could have occurred as a result of the accident did. Examples of non-serious accidents include minor scratches or abrasions or system failures that have minor consequences, such as a low-pressure hose that ruptures and sprays cool water. Examples of serious incidents include both those which did involve lost workdays and/or significant physical injury or property damage and those which reasonably may have. The latter type of serious incident is often called a “near miss.” Examples of near misses include:

- a worker falls from a 1 foot high scaffold but is not injured (this could easily have been a broken leg or worse);
- a worker tips back in a chair and topples backward but does not sustain an injury (backward falls are always serious because head injury might result); or
- a worker turns on a machine and thinks they feel a minor shock – shocks from voltage potential more than 75 volts DC or 40 volts AC are considered serious; such an incident may also indicate that there is a major problem with the machine and may require follow-up.

Because this distinction is extremely subtle, faculty, staff and students are encouraged to report both. After the report of an incident, regardless whether it is initially deemed serious or non-serious, the Director or his or her designee will investigate. Although more time and effort may be required to investigate what ultimately is determined to be a serious incident. Those involving lost workdays or near misses, all incidents should be appropriately investigated and an Incident Investigation Report should be filed, as the sound investigation of a non-serious incident could very well prevent the occurrence of a serious incident in the future.

B. WHO SHOULD INVESTIGATE

As indicated above, the primary responsibility for investigating an accident falls to the Director, or the DSO and/or FSC acting on the Director’s behalf, who should make his or her own initial investigation of all accidents, using the IIT Incident Investigation Form, which is attached hereto. When circumstances warrant (e.g. complex technical issues, chemical exposures, and serious injury), a more comprehensive investigation involving the department head and/or other departmental staff or university personnel may be made. Regardless of the type of investigation, the investigator should timely file his or her Investigation Form with his or her department head, the USLC, the Director and, if appropriate, the Office of Human Resources and the General Counsel’s Office. The Director should timely file his or her report with the affected department head and, if appropriate, the General Counsel’s Office.

C. GENERAL PRINCIPLES AS TO HOW TO INVESTIGATE

A sound basic approach to incident investigation is to find out what caused the accident and what can be done to prevent or minimize the chances of a similar incident occurring. Some suggestions that may help the investigator get the facts include:

1. Maintain objectivity throughout the investigation. The purpose of the investigation is to find the cause of the incident, not to assign blame for its occurrence.
2. Secure the incident site as needed; then check the incident site and circumstances thoroughly before anything is changed.
3. After any needed first aid or medical treatment has been administered, discuss the incident with the injured person and talk with anyone who witnessed the incident and those familiar with conditions immediately before and after it occurred. Witnesses should be interviewed individually and not as a group.
4. Be thorough as small details may point to the real cause.
5. Reconstruct the events that resulted in the incident, considering all possible causes, and determine unsafe conditions or actions that separately or in combination were contributing factors.
6. To the extent relevant, review records or logs that may shed light on the circumstances surrounding the incident.
7. If help is needed in determining the cause, ask for it. In addition to the ULSC and the Director, assistance with accident investigations may also be available from others in the affected department, the Department of Public Safety, the General Counsel's Office and the Facilities Department.

D. HOW TO ANALYZE AN INCIDENT

After the facts have been gathered, the investigator will need to analyze the information in an attempt to determine the cause of the incident. In analyzing an incident, there are almost always two causes – a surface cause and the root cause. As discussed below, a surface cause is the factor that actually caused the incident, and the root cause is the factor, problem or circumstance that contributed to the conditions and practices associated with the incident, i.e. facilitated the occurrence of the surface cause.

1. The **surface cause** of incidents includes those hazardous conditions and individual unsafe behaviors that directly caused or contributed in some way to the incident.

Hazardous conditions may exist in any of the following:

- Materials
- Machinery
- Equipment
- Tools
- Chemicals
- Environment
- Workstations
- Facilities
- People
- Workload

Examples of unsafe behaviors may include:

- Failing to comply with rules
- Taking shortcuts
- Failing to report injuries
- Allowing unsafe behaviors
- Failing to supervise
- Scheduling too much work
- Using unsafe methods
- Horseplay
- Failing to report hazards
- Failing to train
- Failing to correct
- Ignoring worker stress

2. The **root cause** of incidents is the underlying system weaknesses that have somehow contributed to the existence of hazardous conditions and/or unsafe behaviors that represent surface causes of accidents. Root causes always pre-exist surface causes. Root causes generally fall into one of two categories: system design weaknesses or system implementation weaknesses. Examples of each are:

System Design Weaknesses

- Missing or inadequate safety policies/rules
- Training program not in place
- Poorly written plans
- Inadequate process
- No procedures in place

System Implementation Weaknesses

- Safety policies/rules are not being enforced
- Safety training is not being conducted
- Adequate supervision is not conducted
- Incident/Accident analysis is inconsistent
- Lockout/Tagout procedures are not reviewed annually

E. WHAT TO DO WITH THE RESULTS

Upon completion of an investigation, an Incident Investigation Form should be filed with (i) the head of the affected department, (ii) the Chair of the IIT Safety Policy Committee, (iii) the FSC and the Director, if they have not conducted the investigation; and (iv) Department of Human Resources. Once the Incident Investigation Form is filed, the head of the affected department should take appropriate action to control or eliminate the conditions (both the surface and root causes) that caused the incident (regardless whether the incident was ultimately deemed to have been serious or non-serious) once these have been conclusively identified. Actions may include:

1. When equipment changes or safeguards are necessary, specific recommendations

should be discussed with the department head.

2. When an operation can be changed to eliminate the hazard, department heads should make the change if it is within his or her authority, or seek the necessary approval for the change.
3. If unsafe acts by workers are involved, ensure that the worker is properly trained and that training is followed. All others involved in similar operations should be trained as well.

The Director, as appropriate, may conduct follow-up as needed to ensure that appropriate corrective action has been taken. The ultimate goal is to do what can reasonably be done to prevent in the future non-serious incidents from becoming serious and to minimize the likelihood of a serious incident.

IV. APPROVAL

The IIT Safety Policy Committee has reviewed and recommended the adoption of this Policy on June 19, 2006, and this Incident Investigation Policy is approved and effective this 19th day of June 2006. The Safety Policy Committee will review the contents, implementation and effectiveness of this Policy no less than annually (but as often as necessary) and will make modification as necessary to ensure that it meets all required legal and regulatory requirements and is adequately providing a safe and healthful environment for IIT faculty, employees and students. Any modifications to this Policy have been reviewed and approved, and are effective as of the date noted on the cover page.

By: /s/ Alan Myerson
Provost and Senior Vice President

By: /s/ John P. Collins
Vice President for Business & Administration