

Environmental Health and Safety
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ACCIDENT & INJURY INVESTIGATION

PURPOSE

The purpose of this procedure is to provide guidance in investigation and analysis of injuries, illnesses, damages, near misses, spills, and releases. The accident and injury investigation and analysis process determines the reasons for these occurrences and develops recommendations for corrective action to prevent similar occurrences in the future.

SCOPE

This procedure is applicable to any accident, injury, illness, spill, near miss or release.

RESPONSIBILITIES

Investigations are typically conducted by a team of employees. However, the Supervisor/Lead Person may conduct the investigation alone for simple occurrences with low potential for more serious consequences.

Environmental Health and Safety Manager

supports and implements the accident and injury investigation and analysis process reviews and approves investigation reports reviews the accident and injury report with legal, as appropriate assigns responsibilities and target dates for completion of the recommendations and; follows up on the progress of the recommendations

Ensures the accident and injury reports are sent to Drake Public Safety for filing Can function as the investigative lead in some instances

Supervisor/Lead Person

convenes an accident and injury investigation and analysis team leads the investigation prepares the investigation report reviews report with the EHS director Reviews the report with employees and others as appropriate initiates action on the recommendations follows up to assure recommendations are completed or resolved documents the actions or resolution and; files the reports

Employees

Participate on accident and injury investigation teams Initiates action on recommendations as assigned

DEFINITIONS

Business Interruption: The sum of lost revenue and continuing expense during the interruption caused by the accident and injury.

Accident and injury: Sudden, unforeseen or unplanned events evidenced by physical damage or other abnormal condition(s).

Near Miss: An unplanned event that did not result in injury, illness or damage but had potential to do so.

First Aid: Any one time treatment of injuries and subsequent observation of minor scratches, cuts, burns, splinters, etc. which do not ordinarily require medical care.

Injury: Any injury that occurs on the job regardless of severity that is not deemed an OSHA Recordable injury. The injury may or may not require first aid treatment.

Recordable Injury/Illness Case: A work-related injury or occupational illness which involves one or more of the following:

• Death,

• Days away from work,

• Loss of consciousness,

- Restriction of work,
- Medical treatment (other than first aid)
- Transfer to another job,

(THE RECORDABLE INJURY DETERMINATION WILL BE MADE BY HUMAN RESOURCES AND EHS)

<u>Days Away From Work Case:</u> A type of lost workday case in which an employee misses one or more full days of work (after the day of the accident and injury) because of a work-related injury or illness.

Restricted Work: An employee, because of a work related injury or illness cannot perform the normal assignment.

Property Loss: The sum of:

• Building loss, • Equipment loss, • Loss of contents, & • Clean-up.

<u>Total Estimated Loss:</u> The sum of the property loss (including clean-up) plus business interruption.

<u>Reportable Process Safety Accident and injury:</u> An acute, unintended release of material or energy from a process resulting in any of the following:

Employee or contractor lost time injury or fatality

Third party injury requiring hospitalization

Fire or explosion causing more than \$25,000 of direct cost to the university

Hazardous chemical release from primary containment (i.e. pipe or vessel) greater than the threshold quantities excluding releases to control devices designed for that event.

Non-Employee Injury: An injury of any severity to any party who is not employed by Drake University. This also covers all injuries that occur to individuals who are employed by Drake University when the injury did not arise out of and in the course of employment.

Significant Accident and injury:

A work-related fatality,

A work-related traumatic injury of a very serious nature which immediately results in, Permanent disability (loss of function or part of the body), for example, amputation, blindness or deafness as a result of trauma or a specific accident and injury, or

A temporary disability requiring an employee to be hospitalized

A Heart Attack occurring on the job

A temporary disability requiring an employee to be away from work for 10 or more scheduled calendar days.

Any single work-related event which results in 3 or more persons being injured beyond "first aid,"

Any event, with or without injuries, which in the opinion of the department manager is of such a nature or potential that it should be communicated throughout the university.

See appendix 2.A for reporting requirements.

PROCEDURE

Identify Accident and injury's

The Supervisor/Lead Person must establish a reporting process for accidents, injuries and near misses. See Appendix 2 for reporting instructions. See Appendix 4 or 5 for Accident and injury Investigation Report forms.

Reporting is vital for the success of the accident and injury investigation process. While some occurrences, such as injuries, illnesses, spills/releases may be readily identified, it is important to stress to all employees the necessity to report the near misses.

Timely Investigation

An investigation should begin as soon as possible after an accident or injury is reported and no later than 48 hours after awareness of the occurrence.

Select an Investigation and Analysis Approach

For minor accident and injuries with little potential for greater severity, the supervisor may elect to investigate the occurrence alone. A brief report may be prepared, including recommendations. This report shall be reviewed with the EHS Director and followed up to ensure completion/resolution of the recommendations.

The team approach is recommended for most occurrences. It provides broader insight and input to the investigation and analysis.

Select an Investigation and Analysis Team

For most occurrences, a team of three persons, including the Supervisor/Lead Person is sufficient. A more complex or serious occurrence may require additional people on the team.

If possible, have at least one team member that is not part of the area where the accident and injury occurred participate. If a contractor was involved, have a representative of the contractor on the team. The team number should be increased to include that representative.

Legal Involvement

Most accident and injuries do not require review by a University Legal Representative. However, under circumstances involving a fatality, a life threatening or debilitating injury, or a release impacting areas outside of university property, a University Legal Representative must be contacted immediately before initiating the investigation. The University Legal Representative will determine whether or not the investigation warrants its review. No investigation of the scene will be started until it has been cleared by the Des Moines Police department if a possible crime is suspected.

Investigation Team Discussion of the Information

Establish a description of the occurrence as a first step in coming to consensus within the team on what happened, what led to it, and what can prevent it or similar occurrences in the future.

A time line or time sequence of events associated with the occurrence is often helpful. Begin the time line at the start of the work shift of the occurrence and continue it until the occurrence is over and its immediate consequences managed.

Investigation Team Decisions on Causal Factors that Led to the Occurrence

There is usually more than one factor that led to an accident and injury—that caused it, directly or indirectly.

Use this phase of the investigation to first look for factors in equipment/facility design and procedures. If such factors are present in the occurrence, they may well be present elsewhere at the University. By identifying them, the effort to investigate this accident and injury can become magnified in its effect. If procedures were not followed be sure to ask "why". If this was simply an isolated instance of failing to follow a procedure, that needs to be noted. On the other hand, if this failure to follow a procedure is an indicator of a wider problem with following this procedure or other procedures, this needs to be addressed.

Investigation Team Proposed Recommendations to Correct the Factors that Led to the Occurrence

The team proposes at least one recommendation for each causal factor/root cause.

Avoid proposing only long term, evaluation type recommendations. There are usually some short term or interim steps that should be taken to minimize the risk of the accident and injury recurring.

Develop the Investigation Report

The report should include:

A listing of what was going on, what happened and what the consequences were. Also, include who was involved, time and place of occurrence. (Accident and injury Statement).

A description of the accident and injury. This is a more detailed version, including, perhaps, the time line.

A listing of the causal factors/root causes

A listing of the proposed recommendations.

A listing of the names of the investigation team members and a place for the approval signature of the EHS Director, Chief Administration Officer and/or Provost and others as necessary.

The Supervisor/Lead Person typically writes the report but it could be done as a collaborative effort by the team (See Appendix 5 for report forms).

Review the Report with the EHS Director

The EHS Director or designated employee assigns responsibilities and target dates for completion on the recommendations and approves the investigation report.

Review the Investigation Report

Review the results of the investigation with the affected parties. This shall be done by one of the following methods a one on meeting, providing them each a copy of the report, posting the report in the work areas, and/or reviewing the report with them in safety meetings.

If the accident and injury involved contract employees or could have affected contract employees, review the accident and injury investigation report with contractors.

Initiate Actions on the Recommendations

The Supervisor/Lead Person will lead the effort to complete or otherwise resolve the recommendations.

File the Investigation Report

All completed reports will be sent to Drake Public Safety and stored electronically.

Provide Periodic Follow up to Actions on the Recommendations

The EHS Director or designated employee will periodically follow up to assure actions on the recommendations are proceeding promptly.

Document Actions to Complete or Resolve Recommendations

The Supervisor/ Lead Person will document the actions taken to complete or resolve recommendations. These will be attached to the original copy of the investigation report on file.

TRAINING

The training will be provided by a qualified instructor, knowledgeable in this procedure and where applicable, regulatory requirements. Training may include and be facilitated by videos, CD ROM, or other training media and aids. A written examination and/or sign off sheet will be part of the training verification.

EVALUATION

Appendix 1 can be used to perform an annual written gap analysis or program evaluation.

APPENDIX 1

Checklist for Implementation of an Accident and injury Investigation Process

		Yes	No
1.	Does the University have a means whereby employees report near		
	miss/first aid accident and injuries as well as those that results in		
	injury/illness, significant property damage, spills or releases?		
2.	Are accident and injuries reported to management and		
	EHS promptly, in any case within 8-24 hours?		
3.			
	case within 48 hours?		
4.	Are investigation teams used for most accident and injuries?		
5.	Do investigation teams develop reports that show thorough		
	analysis of accident and injuries with causal factors/root		
	causes and recommendations?		
6.	Are responsibilities and target completion dates assigned to		
	recommendations?		
7.	Is action taken promptly on completion or resolution of		
	recommendations?		
8.	Is progress on recommendations followed up periodically?		
9.	Are actions taken to complete or resolve recommendations		
	documented and filed with the investigation reports?		
10	. Are recommendation reports maintained on file for at least five		
	years?		

Conducted by:					
Date:					
Date:			G 1.4		
Actions Required	Responsibility	Due Date	Completion Date		

Accident/Injury Reporting Procedures

The following pages describe the steps to follow when reporting accidents or injuries of various types:

Major employee injuries involving death, amputations, or hospitalization – Appendix 2.1

Employee injuries (Workers' Compensation) – Appendix 2.2

<u>Vehicle accidents – involving University vehicles – Appendix 2.3</u>

Accidents not involving a vehicle - Appendix 2.4

Gathering the facts of the occurrence -Appendix 3

<u>First Report of an Injury</u>- Appendix 4.1

Report a Safety Concern Form – Appendix 4.2

Final Accident and injury Analysis Report Form-Appendix 5

Accident and injury Investigation Model-Appendix 6

What constitutes a good accident and injury statement?-Appendix 7

Don't hesitate to call the EHS Department if something happens and you need guidance.

Appendix 2.1

MAJOR EMPLOYEE INJURIES INVOLVING DEATH, AMPUTATIONS, OR HOSPITALIZATION

The following reports of major and other significant accident and injuries are required to ensure that administration is informed in a timely manner, that additional assistance and resources can be provided if needed and that appropriate legal and governmental reports are made where required.

<u>Major Accident and Injuries</u> The following Major Accident and injuries shall be reported as indicated:

Fatalities

Immediately upon learning of the accident and injury the Department Head shall contact, preferably in the following order (time is critical, so if someone on the list is unavailable skip to the next contact):

- 1. Public Safety
- 2. EHS Director

The EHS Director or designee shall make a report to OSHA. The report should be made within 8 hours to the State OSHA office

Information to be provided to OSHA:

Establishment name, location and time of accident and injury, number of fatalities or hospitalized employees, contact person and phone number, and a brief description of the accident and injury.

Hospitalization Injuries

In-patient hospitalization of injured person. This type of injury shall be reported the same as for Fatalities (noted above).

Major Disabling Injuries

Individual work-related traumatic injuries of a very serious nature which immediately result in:
- Permanent disability (loss of function or part of body), such as amputation, or heart attack
This type of injury shall be reported the same as for Fatalities (noted above).

Appendix 2.2 REPORTING EMPLOYEE INJURIES (WORKERS' COMPENSATION)

NOTE: All injuries involving an employee who is hurt while performing their job must be reported under workers' compensation, regardless of whether it is an OSHA recordable accident and injury.

- 1. Ensure the employee receives prompt medical attention. Call 811, an ambulance or a hospital if necessary.
- 2. The first step in assessing work-related injuries for these employees involves access a medical professional. Directions on treatment of the injury, will be provided by the medical professional.
- 3. Within 48 hours, complete the Initial Accident and Injury Investigation Report Form. Return a Completed Copy to the Human Resources Department.
- 4. The employee's treating medical provider(s) should be instructed to send all bills to the Universities Workers Compensation claim handling office. If bills are sent to the University, forward them on to the Human Resources Department.
- 5. Send all forms and other correspondence related to the injury to Human Resources.

Appendix 2.3

REPORTING VEHICLE ACCIDENTS INVOLVING UNIVERSITY VEHICLES

- Call Public Safety at 515-271-2222, when there is a fall, injury, or some type of accident
 or accident and injury on campus. Public Safety has training to assess the situation and
 secure help if injured requests help. Public Safety also completes and forwards an
 accident/accident and injury report to the Insurance Office or Human Resources for
 insurance purposes.
- 2. If Public Safety is not called at the time of the accident and injury, it is the faculty or staff members or the director's responsibility to fill out an <u>Accident and Injury Report</u> online within 48 hours. The online form automatically goes to <u>Risk and Insurance</u>.
- 3. If you know of an accident and injury that an Official Drake Public Safety Report has not been filed, then you will need to fill out an online Accident and injury Report Accident and injury

APPENDIX 2.4

REPORTING ACCIDENTS NOT INVOLVING A VEHICLE (Premises/General Liability)

- 1. Call Public Safety at 515-271-2222, when there is a fall, injury, or some type of accident or accident and injury on campus. Public Safety has training to assess the situation and secure help if injured requests help. Public Safety also completes and forwards an accident/accident and injury report to the Insurance Office or Human Resources for insurance purposes.
- 2. If Public Safety is not called at the time of the accident and injury, it is the faculty or staff members or the director's responsibility to fill out an Accident and injury Report online within 48 hours. The online form automatically goes to Risk and Insurance.
- 3. If you know of an accident and injury that an Official Drake Public Safety Report has not been filed, then you will need to fill out an online Accident and injury Report Accident and injury

APPENDIX 3
Gathering the facts of the occurrence
6

Gather the Facts of the Occurrence

This will typically require interviews with persons who were part of or witnessed the accident and injury. It often requires gathering physical data as well.

Key points to keep in mind about interviewing:

- Use a pleasant tone of voice and phrase questions so that they are not accusative
- Ask open-ended questions, i.e. ones that require more to answer than just "yes" or "no."
- All members of the committee should ask questions.
- Let the interviewee tell the story. Take notes but do not interrupt to ask questions until the interviewee is finished.
- At the close, summarize what you heard the interviewee say.

Identify the physical data or information the investigation team believes should examined. Make arrangements or assignments to obtain that data or information. If there will be a substantial amount of information to collect, it may be useful to catalog the information in a filing system.

Anything that is collected or noted should have a corresponding picture taken before it is moved or adjusted whenever possible. This would include the position of switches, lock/out tagout gear, condition of equipment etc.

	APPENDIX 4.1
	First Report of an Injury
	Inst Report of an Injury
1 /	This form can be found online at:
<u> </u>	/www.drake.edu/hr-internal/formslibrary/forms/firstreportofinjuryform/

		A DDENDA	X 4.0		
		<u>APPENDI</u>	<u>X 4.2</u>		
	Report a S	Safety Concer	n/Near Miss	<u>Form</u>	
To report a conce	rn or near miss th	hat did not resu	ult in an iniur	v nlease use	the form locate
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APPENDIX 5	
Final Accident and injury Analysis Report Form	

Final Accident/Injury Analysis Report

Drake University (Department Name) TITLE OF ACCIDENT AND INJURY: (XXXXXXXXXX) **ACCIDENT AND INJURY ANALYSIS NO: (XXXX)** DATE Occurred: TIME Occurred: ACCIDENT AND INJURY STATEMENT: (What was going on, what went wrong, what were the consequences?) ACCIDENT **AND INJURY CLASSIFICATION:** Date Analysis Initiated: (Investigation Date) Date Analysis Completed: (Report Date) **CAUSAL FACTORS/ROOT CAUSES/CORRECTIVE ACTIONS:** A. Causal Factor: **Root Cause: Corrective Action 1: Responsible Person: Due Date: Root Cause: Corrective Action 2: Responsible Person: Due Date:** B. Causal Factor: **Root Cause: Corrective Action 1: Responsible Person: Due Date:**

(Narrative of the accident and injury)
ADDITIONAL INFORMATION:
(List additional relevant information.)
PICTURES:
(Include relevant pictures to help in showing the accident and injury)
ANALYSIS TEANA CHAID /FACHITATOD.
ANALYSIS TEAM CHAIR/FACILITATOR:
ANALYSIS TEAM MEMBERS:
APPROVALS:

ACCIDENT AND INJURY DESCRIPTION/DETAILS:



Purpose	Incident Analysis Model	Techniques
Determine significance & decide to investigate	Notific ation	
Plan investigation	Pla n ation Investig	Events & Causal Factors Charting Root Cause Tree
Collect facts by interviewing & collecting physical evidence	Collect Information	Events & Causal Factors Charting Root Cause Tree
Understand incident, ensure complete investigation, ensure accuracy of "facts"	Determine Sequence of Events	Events & Causal Factors Charting
Identify factors that could have prevented or mitigated incident	Identify Incident's Causal F₃ctors	Events & Causal Factors Charting Safeguards Analysis (optional)
Find correctable causes for the specific causes of the incident	Identify Root Causes	Events & Causal Factors Charting Root Cause Tree
Identify important trends or programmatic weaknesses	Identify Generic Causes	Root Cause Tree
Ensure corrective actions address root causes to prevent recurrence	Develop Corrective Action	Root Cause Tree Safeguards Analysis (optional)
Accurately document event, Effectively present management with findings	Report	Events & Causal Factors Charting

APPENDIX 7
What constitutes a good accident and injury statement? Additional guidance and training material for writing an accident and injury statement

Accident and injury Summary/Accident and injury Statement

An accident and injury summary is a concise statement or summary of what occurred during the accident and injury. The accident and injury summary is developed when developing the Final Accident and injury Analysis Report form. NOTE: <u>Do not add names to the final report, use employee, operator, temp, etc. in place of the employee's name.</u> The accident and injury summary includes:

What was going on when the accident and injury occurred?

What went wrong?

What were the consequences of the accident and injury?

How was the accident and injury classified (i.e. Recordable, first aid)

It should not include:

Names of individuals

Specific Medical Treatment/Information.

EXAMPLE:

Entry (Names	and Medical	Information	blacked	out)
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Accident and injury Description: At app	proximately 10:00 AM on July 20, 2010,	called
her supervisor and said she was experie	ncing hip pain and discomfort stemming from c	changing a flat tire. Ms.
's vehicle developed a flat tire o	n July 19, 2010, while she was on trip to a dono	or meeting. During
the course of changing the tire, Ms.	started to feel discomfort in her right h	nip. After the tire was
	onor meetings until the pain became unbearable	
hotel that afternoon and took some Exc	edrin for the pain. The next morning, Ms.	went out to continue
	so she called her supervisor at the University	
XXX 's supervisor recommended that	she cancel remaining meetings and return to t	he university to determine
	returned to the university and discussed the e	
Human Resources Director, and	, alumni donor director. She indicated havin	g a similar accident and
injury a month previously; however, it od	ccurred to her other hip and was corrected wit	th a visit to the
chiropractor. Mr. spoke with	a Nurse, concerning the situation	and Ms.
recommended that Ms.	doctor for an examination of her hip. Ms.	was seen by a
	equently restricted from certain activities for	
July 22 2010) XXX also received	d chiropractic care for her injury	

Comments: It has been determined that this accident and injury fits the definition of recordable and is being amended as such.

Suggested Accident and injury Statement

Accident and injury Description: While on a donor meeting, employee had a flat tire and changed it; continuing on with donor meetings their hip became painful from changing the flat. When the employee's hip started hurting, they consulted her supervisor and a nurse; they indicated that a similar accident and injury a month earlier had been relieved by a chiropractor. A local physician treated her, and recommended restricted duty for 3 days.

The First Report of Injury will include names and other confidential information.

Names and personal information are not permitted on the Final Accident and Injury Analysis Report.