Lab Safety Event

Data Collection Form – Electronic Form

The purpose of this form is to collect information about a lab safety event and to prompt the analysis of why it occurred so that it can be prevented in the future. This could be an event that led to an injury, exposure, or damage to equipment or to a facility. It could also be a near-miss event, which is an unplanned event that did not result in injury, illness, or damage, but had the potential to do so.

This form should be completed as soon as possible after the event.

# Report Information

|  |  |  |
| --- | --- | --- |
|  | Date of Form Completion | \*Click here to enter the date the form is completed. |
|  | Form Competed by | \*Click here to enter name. |

# Laboratory and Personnel Background

|  |  |  |
| --- | --- | --- |
|  | Name of Principal Investigator or Facility Director  | \*Click here to enter name. |
|  | Department | \*Click here to enter department. |
|  | Primary Type of Work Done by the Lab | \*Choose an item. |
|  | Location of Event (Building and Room Number) | \*Click here to enter building and room number. |
|  | Type of Laboratory | \*Choose an item. |
| \*[ ]   | Check this box if there is no Primary Person to identify for this event (Skip questions 8 – 11) |
|  | Name of Primary Person Involved in Event | \*Click here to enter name. |
|  | Title of Primary Person  | \*Click here to enter title. |
|  | Primary Person’s Experience Level in this or Similar Lab/Facility  | \*Choose an item. |
|  | Is all Institution-required safety training complete and current for this person? | \*Select the best answer. |
| Optional: Explain Training Status | \*Click here to enter explanation if needed. |
|  | If applicable, list the names and titles of other persons involved in the *event* | \*Click here to enter names and titles (if applicable). |
|  | If applicable, list the names and titles of other persons involved in the *response* | \*Click here to enter names and titles (if applicable). |

# Procedure Background

|  |  |  |
| --- | --- | --- |
|  | Describe the intended procedure, lab equipment, or process involved in the event. | \*Click here to enter text. |
|  | If there is a literature reference for this procedure, provide the citation.  | \*Click here to enter reference if applicable. |
| \*[ ]  | N/A, no reference |
|  | What was the primary type of process? | \*Select the best response. |
|  | In which phase of the process did the event occur? | \*Select the best response. |
|  | Which chemicals, if any, were involved in the procedure? | Include amounts and concentrations. Approximate if necessary.\*Click here to enter chemical information if applicable. |
| \*[ ]   | N/A, No chemicals |
|  | Which animals, biological agents, or infectious materials, if any, were involved in the procedure? | Include amounts and concentrations. Approximate if necessary.\*Click here to enter biological or animal information if applicable. |
| \*[ ]  | N/A, No animals or biologicals |
|  | What equipment or apparatus, if any, were involved in the procedure? | Include make and model number if applicable\*Click here to enter equipment information if applicable |
| \*[ ]   | N/A, No equipment |
|  | Was there a written Standard Operating Procedure or Hazard Control Plan for this procedure? | \*Choose the best response. |

# Event Description

|  |  |  |
| --- | --- | --- |
|  | Event Date and Time | Select a date, then edit the time. Use approximate time if necessary. \*Select a date, then edit the time. |
|  | Narrative Description of Event* Do not include the emergency response actions taken.
* Do not include identifying information, such as names, in this narrative
 | Describe what happened leading up to the event.\*Click here to enter text. |
|  | Was the primary person involved the **only person in the room** when this event occurred (i.e. a "lone worker")? | \*Choose the best response. |
|  | Did the event occur **outside of standard operating hours** as defined by the institution? For example: During the weekend, a holiday, or after normal business hours. | \*Choose the best response. |
|  | Select all personal protective equipment (PPE) worn at the time of the event. Select an answer for each category, or select N/A and skip to next question.  | \*[ ]   | **N/A, process was unattended** (skip to next question) |
| **Eye/Face Protection**\*Choose an item. |
| **Gloves**\*Choose an item. |
| **Lab Coat or Protective Garment**\*Choose an item. |
| **Proper Lab Attire Worn?**\*Choose an item.(Proper Lab Attire includes long pants and fully-enclosed shoes) |
| Describe any **other** PPE not listed (e.g. respirator) | \*Click here to enter text. |

# Injuries and Damages

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|  | Select all injury types that applyOr select “N/A, No Injury” and skip to the next question. | \*[ ]  | N/A, No Injury (skip to next question) |
| \*[ ]  | Chemical Exposure | \*[ ]  | Animal Bite |
| \*[ ]  | Environmental Exposure (Animal, Dust, Mold, etc.) | \*[ ]  | Cryogenic Burn |
| \*[ ]  | Exposure to Biological Material or Pathogen | \*[ ]  | Cut/Laceration |
| \*[ ]  | Exposure to Radiation/UV/Laser | \*[ ]  | Electrical Shock |
| \*[ ]  | Dermal Exposure to Corrosive Material | \*[ ]  | Injury from Machine or Equipment |
| \*[ ]  | Dermal Exposure to Toxic Material | \*[ ]  | Needle stick |
| \*[ ]  | Ingestion Exposure | \*[ ]  | Permanent Disability or Death |
| \*[ ]  | Inhalation Exposure (vapor/dust/aerosol) | \*[ ]  | Slip/Trip/Fall |
| \*[ ]  | Allergic Reaction | \*[ ]  | Thermal Burn (Heat) |
|  | Describe any **other** injury type not listed. | \*Click here to enter text. |
|  | Select all physical events that apply Or select “N/A, No Physical Event” and skip to the next question. | \*[ ]  | N/A, No Physical Event (skip to next question) |
| \*[ ]  | Chemical Spill/Leak/Release |
| \*[ ]  | Contaminated Surface |
| \*[ ]  | Explosion (with fire) |
| \*[ ]  | Explosion (no fire) |
| \*[ ]  | Fire (Contained to Initial Fuel Source) |
| \*[ ]  | Fire (Spread beyond Initial Fuel Source) |
| \*[ ]  | Flood (Water) |
| \*[ ]  | Gas Leak |
| \*[ ]  | Over Pressurization |
| \*[ ]  | Vacuum Pressure Implosion |
| Describe any **other** physical event type not listed. | \*Click here to enter text. |
|  | Select all the consequences of the event.Or select “Near Miss Event (no resulting damages) and skip to the next question. | \*[ ]  | Near Miss Event (no resulting damages, skip to next question) |
| \*[ ]  | Equipment or Facility Damage or Destruction |
| \*[ ]  | Equipment or Spill Clean-up Required |
| \*[ ]  | First-Aid Required |
| \*[ ]  | Medical Consultation or Evaluation Only(No Treatment Provided beyond Decontamination) |
| \*[ ]  | Medical Treatment Required beyond First-Aid |
| \*[ ]  | One or More Lost Work Days Due to Equipment/Facility Damage |
| \*[ ]  | One or More Lost Work Days Due to Injury |
| \*[ ]  | Personal Decontamination Required |
| \*[ ]  | Loss of Research |
| Describe any **other** consequence type not listed | \*Click here to enter text. |

# Event Response

|  |  |  |
| --- | --- | --- |
|  | Narrative Description of Response. * Describe the response to the event.
* Do not include identifying information, such as names, in this narrative.
 | \*Click here to enter text. |
|  | Select all emergency response to scene of event. Or select “N/A, No Emergency Response” skip to the next question.  | \*[ ]  | N/A, No Emergency Response (skip to next question) |
| \*[ ]  | Assistance Provided by EH&S Department |
| \*[ ]  | Assistance Provided by Members of Another Lab |
| \*[ ]  | Assistance Provided by Other On-site Resources (Facility Manager, Security Officer, Etc.) |
| \*[ ]  | Assistance Provided by Others in the Lab |
| \*[ ]  | External Agency Response (Fire Department, Ambulance, Etc.) |
| \*[ ]  | Response Handled ONLY by Person Immediately Involved |
|  | Describe any **other** emergency response type not listed | \*Click here to enter text. |
|  | Select all emergency equipment that was usedOr select “N/A, No Emergency Equipment used" and skip to the next question. | \*[ ]  | N/A, No Emergency Equipment Used (skip to next question) |
| \*[ ]  | Building Sprinkler System | \*[ ]  | Emergency Shutdown Device |
| \*[ ]  | Emergency Eye Wash | \*[ ]  | Fire Alarm (Pull Station) |
| \*[ ]  | Emergency Safety Shower | \*[ ]  | Fire Extinguisher |
| \*[ ]  | First-Aid Supplies | \*[ ]  | Smoke or Fire Detector (Automatic) |
| Describe any **other** emergency equipment type not listed | \*Click here to enter text. |
|  | Select all notifications made immediately after the eventOr select “N/A, No Notifications" and skip to the next question.­­ | \*[ ]  | N/A, No Notifications (skip to next question) |
| \*[ ]  | 911 | \*[ ]  | Lab Manager |
| \*[ ]  | Building Admin. /Facility Manager | \*[ ]  | P.I. or Supervisor of Lab |
| \*[ ]  | Campus Emergency Response Number | \*[ ]  | Student Health or Occupational Medicine |
| \*[ ]  | EH&S Department |  |  |
| Describe any **other** notification type not listed | \*Click here to enter text. |
|  | Select all locations where medical evaluation or treatment was receivedOr select “N/A, No Medical Follow-up" and skip to next section. | \*[ ]  | N/A, No Medical Follow-up (skip to next question) |
| \*[ ]  | Hospital Emergency Department | \*[ ]  | Personal/Family Physician |
| \*[ ]  | Occupational Medicine Clinic | \*[ ]  | Urgent Care Facility |
| \*[ ]  | Student Health Services Clinic | \*[ ]  | Other Medical Specialist (e.g. ophthalmologist) |
| Describe any **other** treatment location not listed | \*Click here to enter text. |

# Amount of Loss

|  |  |
| --- | --- |
| \*[ ]  | Check this box if there are no financial or scientific losses from this event (skip to next section) |
| \*[ ]  | Check this box if loss amounts are not known, or if you do not wish to enter the losses for this event (skip to next section) |
|  | Total number of people injured or ill as a result of this event | \*Click here to enter the number of people injured or ill. **People**  |
|  | Total amount of working time lost Enter as number of whole days | \*Click here to enter working time lost as number of days. **Days** |
|  | Describe scientific losses (data, samples, equipment)Leave blank if N/A | \*Click here to describe scientific losses if applicable. |
|  | Approximate dollar amount from all losses | \*Click here to enter dollar amount of losses if known. |
| \*[ ]  | Check this box if dollar amount is not yet known at time of form completion |

# Cause and Contributing Factors

|  |  |  |
| --- | --- | --- |
|  | Describe the primary cause of the event in your own words.Do not include identifying information, such as names, in this description. | \*Click here to enter text. |
|  | Select all of the **Hazard Recognition** factors may have contributed to or directly caused this event. | \*[ ]  | The Scientific Community’s lack of knowledge about this hazard |
| \*[ ]   | Inadequate chemical or hazard labeling |
| \*[ ]   | Researcher not appropriately educated on known hazard |
| \*[ ]   | Inattention or failure to recognize conditions presenting a situational hazard |
| \*[ ]  | Under-estimating risks (likelihood and/or severity) presented by a hazard |
| \*[ ]  | Failure to recognize that a change in process or scale introduced new hazard or increased risks |
| \*[ ]  | Other hazard recognition factor (not listed) |
| \*[ ]  | N/A, Hazard was fully recognized. Hazard recognition was not a factor. |
|  | Explain all **hazard recognition** factors selected above. | \*Click here to enter text. |
|  | Select all of the **Hazard Management** factors may have contributed to or directly caused this event. | \*[ ]  | Equipment malfunction |
| \*[ ]  | Excessive chemical quantity or concentration |
| \*[ ]  | Facility limitations |
| \*[ ]  | Failure to substitute or eliminate hazardous material/process where possible |
| \*[ ]  | Improper procedure/technique used |
| \*[ ]  | Inappropriate equipment used or set-up not appropriate |
| \*[ ]  | Personal protective equipment not available |
| \*[ ]  | Personal protective equipment use not enforced |
| \*[ ]  | Poor equipment design or maintenance |
| \*[ ]  | Poor housekeeping/clutter |
| \*[ ]  | Other hazard management factor (not listed) |
|  | Explain all **hazard management** factors selected above. | \*Click here to enter text. |

# Lessons Learned

|  |  |  |  |
| --- | --- | --- | --- |
|  | Select all mitigating factors **limited the extent** of the damage/loss once the event occurred.Or select “None, no response” and skip to the next question. | \*[ ]  | None, No response (skip to next question) |
| \*[ ]  | Intervention by personnel to resolve or confine issue |
| \*[ ]  | Presence of shielding/guarding |
| \*[ ]  | Use of emergency response equipment to resolve or confine issue |
| \*[ ]  | Use of personal protective equipment |
| \*[ ]  | Ventilation |
| \*[ ]  | Immediate personal decontamination (emergency irrigation or other method) |
| \*[ ]  | Rapid medical response |
| \*[ ]  | Emergency shutdown device |
| \*[ ]  | Personnel knowledge of proper emergency procedures |
| \*[ ]  | Alarms and notifications (manual, e.g. pull stations or phone calls) |
| \*[ ]  | Alarms and notifications (automatic, e.g. detectors) |
| Describe any **other** mitigating factors not listed | \*Click here to enter text. |
|  | Select all suggested changes to prevent recurrence or minimize loss in future | \*[ ]  | Hazard elimination/substitution |
| \*[ ]  | Additional training or improved training (by EH&S Department) |
| \*[ ]  | Additional Training or Improved Training (in lab) |
| \*[ ]  | Administrative controls/work practices |
| \*[ ]  | Better availability or types of emergency equipment |
| \*[ ]  | Change in existing lab procedure or equipment set-up |
| \*[ ]  | Engineering controls |
| \*[ ]  | Improved emergency response |
| \*[ ]  | Improved hazard communication/awareness |
| \*[ ]  | Improved housekeeping |
| \*[ ]  | Improved laboratory/facility inspections |
| \*[ ]  | Improved supervision of personnel |
| \*[ ]  | Personal protective equipment |
| \*[ ]  | Preventative maintenance |
| \*[ ]  | Written Standard Operating Procedure or Hazard Control Plan |
| \*[ ]  | Other suggested change (not listed) |
|  | Explain all **suggested changes** selected above | \*Click here to enter text. |
|  | How can the **EH&S department** help to prevent future events of this kind or improve response? | \*Click here to enter text.  |
|  | How will the **lab (PI, facility manager, or lab workers)** prevent future events of this kind or improve response? | \*Click here to enter text. |