



BIOHAZARD ACCIDENT & INCIDENT REPORTING

Introduction

Prompt reporting of all accidents and incidents involving biohazardous materials is a crucial component of maintaining safe workspaces at UNL. Exposures involving biohazardous materials require immediate and proper response to minimize potential for further injury or infection. In most cases, treatment for biohazard exposures is time sensitive. This document identifies situations that should be reported and the information requested by the EHS Biosafety team for investigation and follow-up. The following EHS SOPs provide additional information to supplement this SOP.

- **On-the-Job and Student Injuries**
- **Spill and Exposure Response for Biohazardous Materials**
- **NIH Incident Reporting for r/sNA Molecule Work**

Definition: *Biohazardous materials are infectious agents or biologically derived materials and/or recombinant or synthetic nucleic acid molecules that present a known risk or potential risk to the health of humans, animals, plants, or the environment.*

Biohazard Accidents/ Incidents

All accidents/ incidents involving biohazardous materials must be reported to the UNL Biosafety Office (BSO). Examples include:

- Spill of material outside of a biosafety cabinet
- Needle-sticks
- Splash to the face
- Animal or insect bite/scratch*
- Centrifuge failure
- PPE failure
- Animal escape
- Accidental release of plant material outside of greenhouse
- Improper inactivation/disposal

**If organism is genetically modified or infected with a pathogenic microbe*

Definitions:

Accident- An event that happens unexpectedly and unintentionally and that results in risk of damage or injury.

Incident- An event that could have been avoided if proper procedures were being followed.

Near miss- When an event almost happens or happens but does not create an accident or an incident.

Reporting

PIs and research personnel are expected to provide sufficient information to allow for a thorough understanding of the accident or incident. This means a description of who, what, when, where, why, how long, cause and contributing factors, potential consequences, actions taken, mitigating factors, and ideas of steps that could be taken to prevent recurrence. A sample reporting form can be found in **Appendix A** of this document.

NOTE: It is not a requirement to submit this form when reporting a near miss but is useful to formulate your thoughts of the actions that took place leading up to and after the event. Be prepared to provide the information requested on the form when you contact the Biosafety Office.



Reports can be submitted via email to biosafety@unl.edu or by calling 402.472.4925 and asking for a member the biosafety team.

NOTE:

- Reports of incidents and accidents involving biohazardous materials should go to the Biosafety Office and the responsible PI/Supervisor.
- Reports of structural and equipment compromise should go to your Building Maintenance Reporter and the responsible PI/Supervisor, as appropriate.
 - E.g.: broken doors, eyewash not functioning properly, water leaks, cracks/ dents, centrifuge rotor damage, seal damaged on autoclave door or chemical/ biological indicator fails to change color/ pass, strange sound/smell from equipment, etc.
- Reports of biological security breach should go to UNLPD, NCard Office, the Biosafety Office, Building Maintenance Reporter, and the responsible PI/Supervisor, as applicable.
 - E.g.: lost or stolen key or keycard, lost or stolen work computer/ laptop/ phone, suspicious person, door or gate not locking/ closing etc.
- Reports of any near miss/ good catch situations should go to the Biosafety Office and responsible PI/Supervisor:
 - E.g.: Noticing biohazard bags are not holding up/ containing the waste; spill occurred inside the biological safety cabinet; nearly lacerated finger while using a sharp instrument.

Overt or potential exposures to certain pathogens may necessitate notification to other public health authorities as applicable (USDA – United States Department of Agriculture, CDC – Centers for Disease Control and Prevention, state, and local public health departments).



Follow up and Corrective Actions

As part of the accident or incident review process, the Biosafety Officer or another member of the EHS Biosafety team may request additional information such as training history, funding sources, witnesses, etc. This information may be necessary should there be a need for reporting to a regulatory or funding agency.

The BSO in consultation with the PI and Institutional Biosafety Committee, will review the incident/ accident and determine if any corrective actions are necessary following the event. These actions may include staff re-training, modification of the IBC protocol and lab specific procedures, or ongoing medical surveillance depending on the nature and severity of the event. Ideally, all issues surrounding an accident or incident will be resolved prior to reporting to NIH or other regulatory authorities. However, NIH or other agencies may require additional corrective actions and/or follow up for certain incidents. The BSO will be responsible for responding to any corrective action or information requests from the NIH or other regulatory authorities and assuring that they are promptly implemented. PIs and affected lab workers will be expected to comply with any prescribed corrective action.



Appendix A

BIOHAZARD ACCIDENT/ INCIDENT REPORT FORM

Name of contact person:	
Phone number of contact person:	
Email Address:	
Principal Investigator:	
Recombinant or synthetic nucleic acid involved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Describe:
Date of Incident:	
Location of Incident:	
Pathogen, toxin, animal, r/sNA or other biohazardous material in use at the time of the incident:	
Biosafety level of space where incident occurred:	<input type="checkbox"/> BSL-1 <input type="checkbox"/> BSL-2 <input type="checkbox"/> BSL-3 <input type="checkbox"/> ABSL-1 <input type="checkbox"/> ABSL-2 <input type="checkbox"/> ABSL-3 <input type="checkbox"/> BSL-1P <input type="checkbox"/> BSL-2P <input type="checkbox"/> ACL-1 <input type="checkbox"/> ACL-2
Describe the type of incident (spill, needlestick, splash, animal bite, etc.):	<input type="checkbox"/> Spill <input type="checkbox"/> Needlestick <input type="checkbox"/> Personnel Exposure <input type="checkbox"/> Animal Bite <input type="checkbox"/> Escaped animal (infected or genetically modified) <input type="checkbox"/> Containment Breach <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Other (describe):
What PPE was the individual wearing at the time of the incident (gloves, lab coat, goggles)?	



Was there a PPE failure?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe the failure:
What measures were taken to control the incident? (e.g., handwashing, spill cleanup)	
Did the exposed/injured individual(s) receive medical treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If so, where?	
Was there an injury as part of the incident?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were HR Workers' Compensation forms completed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Please describe the incident in as much detail as possible (list any external events which may have contributed to the incident):	
<div style="border: 1px solid black; height: 300px;"></div>	