ENVIRONMENTAL HEALTH AND SAFETY
University of Nebraska-Lincoln

Safe Operating Procedure

(Revised 10/23)

BIOHAZARD INCIDENT REPORTING

Introduction

Prompt reporting of all incidents involving biohazardous materials is a crucial component of maintaining safe workspaces at UNL. Exposure incidents involving biohazardous materials require immediate and proper response to minimize the potential for injury or infection. In most cases, treatment for biohazard exposures is very time sensitive. This document does not describe biohazard incident response procedures, but identifies the incidents that should be reported, the reporting requirements for recombinant and synthetic nucleic acid molecules (r/sNA) that fall under the NIH Guidelines, the information requested by the EHS Biosafety team for incident investigation, and incident follow up procedures. The following EHS SOPs contain specific guidance for responding to incidents involving injuries, spills and exposures to biohazardous materials:

- **On-the-Job and Student Injuries**
- **Spill and Exposure Response for Biohazardous Materials**

Definition: *Biohazardous materials are infectious agents or biologically derived infectious 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 Incidents

All incidents involving biohazardous materials must be reported to the UNL Biosafety Officer. Examples of reportable incidents include:

- A 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*

Reporting

PIs will be expected to provide sufficient information to allow for a thorough understanding of the incident. This means a description of who, what, when, where, why, how long, cause and contributing factors, potential consequences, actions taken, mitigating factors, and steps to prevent recurrence. A sample reporting form can be found in **Appendix A** of this document. It is not a requirement to submit this form when reporting an incident but please be prepared to provide the information requested on the form when you contact the Biosafety Officer (BSO).

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

Incidents involving r/sNA-containing materials

All recombinant or synthetic nucleic acid (r/sNA) projects at the University of Nebraska-Lincoln (UNL) must adhere to the requirements of the *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules*. These guidelines require that certain incidents be reported to the NIH. Incidents that are subject to NIH reporting requirements are described below.

Information concerning noncompliance with the *NIH Guidelines* may be reported by any person. If you have concerns about potential non-compliance with the *NIH Guidelines* at UNL, please contact the BSO at ibc@unl.edu or 402.472.4925.

Principal Investigators (PIs) have a responsibility to promptly and in some cases immediately notify the BSO of reportable incidents (Table 1). The BSO will gather the necessary information and ensure that an incident report is filed with the NIH in accordance with the procedures described in the **UNL Biosafety Guidelines**.

Table 1 NIH Incident Reporting Guidance

Incident Type	NIH Reporting Requirements
Violations of the NIH Guidelines • Failure to obtain IBC approval before initiation of work. • Failure to adhere to approved containment and biosafety practices	Within 30 days of incident
Research-related accidents and illnesses • Breach of containment • Loss of a genetically modified animal • Release of pollen from genetically modified plants outside the greenhouse • Not ensuring proper destruction/biological inactivation of genetically modified plant, animals, or microorganisms	Within 30 days of incident
Spills or accidents at BSL-2 resulting in overt exposure to r/sNA	Immediate Reporting
Spills or accidents at BSL-3 or BSL-4 resulting in an overt **or** potential exposure to r/sNA	Immediate Reporting
Minor spills of low-risk agents not involving a breach of containment that were properly cleaned and decontaminated	Contact NIH to determine

Overt or potential exposures to certain pathogens may also 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 incident investigation, the BSO 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 the incident need to be reported to a regulatory or funding agency.

The BSO in consultation with the PI and Institutional Biosafety Committee will determine if any corrective actions are necessary following the incident. These actions may include staff re-training, modification of the IBC protocol, or ongoing medical surveillance depending on the nature and severity of the incident. Ideally, all issues surrounding an incident will be resolved prior to reporting to NIH or other regulatory authority. 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 INCIDENT REPORTING FORM

Name of contact person (if not PI):	
Phone number of contact person (if not PI):	
Principal Investigator:	
IBC Protocol #:	
Date of Incident:	
Location of Incident:	
Describe the r/sNA, pathogen, toxin, animal or other biohazardous material in use at the time of the incident:	
Biosafety level of space where incident occurred:	❑ BSL-1 ❑ BSL-2 ❑ BSL-3 ❑ ABSL-1 ❑ ABSL-2 ❑ ABSL-3 ❑ BSL-1P ❑ BSL-2P
Describe the type of incident (spill, needlestick, splash, animal bite, etc.)	❑ Spill ❑ Needlestick ❑ Personnel exposure ❑ Animal bite ❑ Escaped animal (infected or genetically modified) ❑ Containment Breach ❑ Equipment Failure ❑ Other (describe):
What PPE was the individual wearing at the time of the incident (gloves, lab coat, goggles)?	
Was there a PPE failure?	☐ Yes ☐ 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?	☐ Yes ☐ No
If so, where?	
Was there an injury as part of the incident?	☐ Yes ☐ No
If so, were HR Workers' compensation forms completed?	☐ Yes ☐ No

Please describe the incident in as much detail as possible (list any external events which may have contributed to the incident):